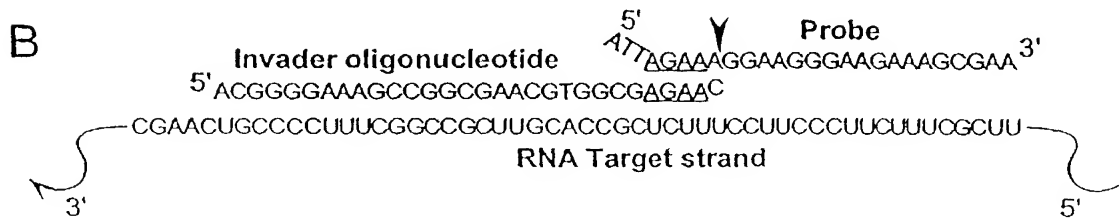
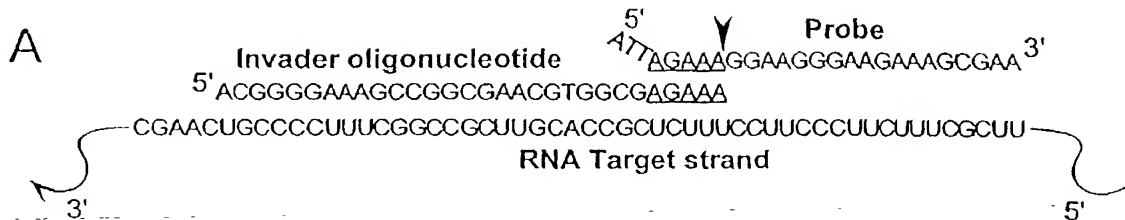


FIGURE 1

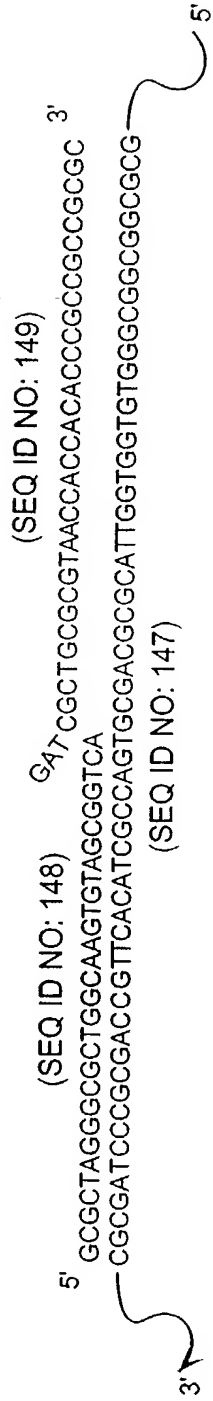


FIGURE 2





A



B

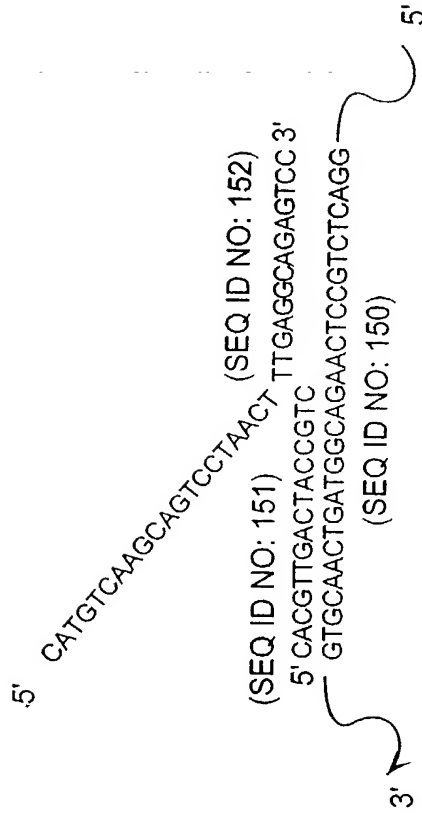


FIGURE 3

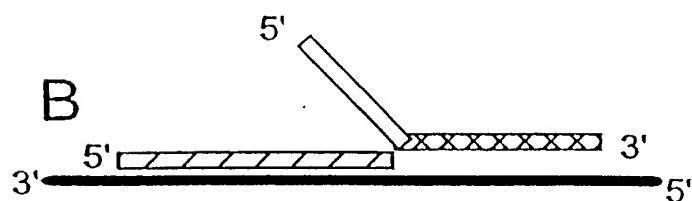
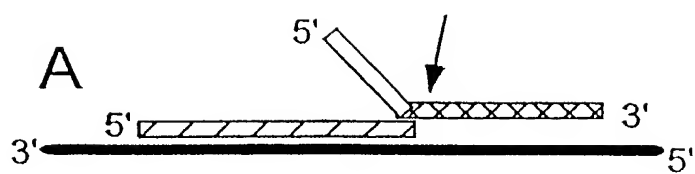


FIGURE 4



2002/08/29 10:00:00

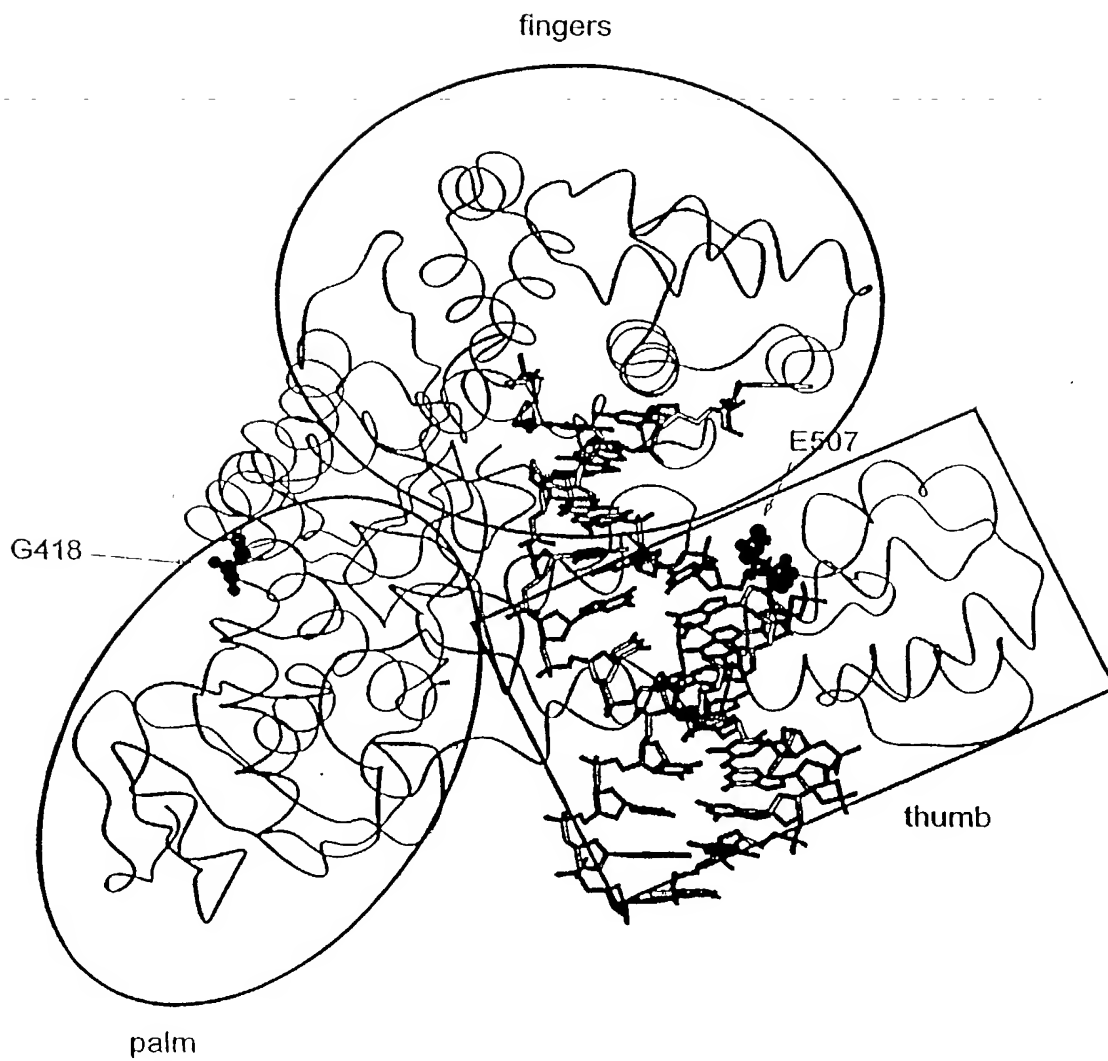


FIGURE 5

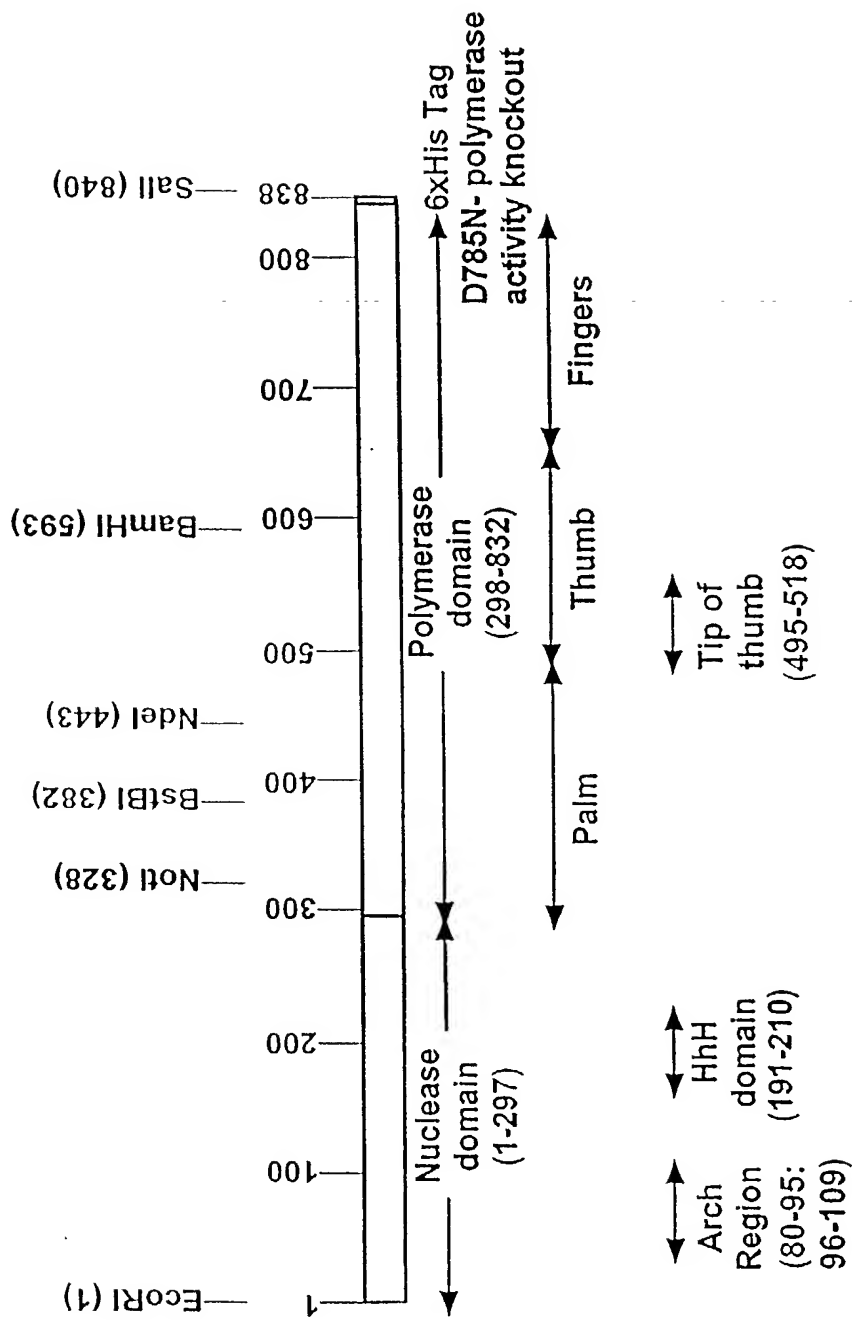


FIGURE 6



2004-09-17 14:44:02

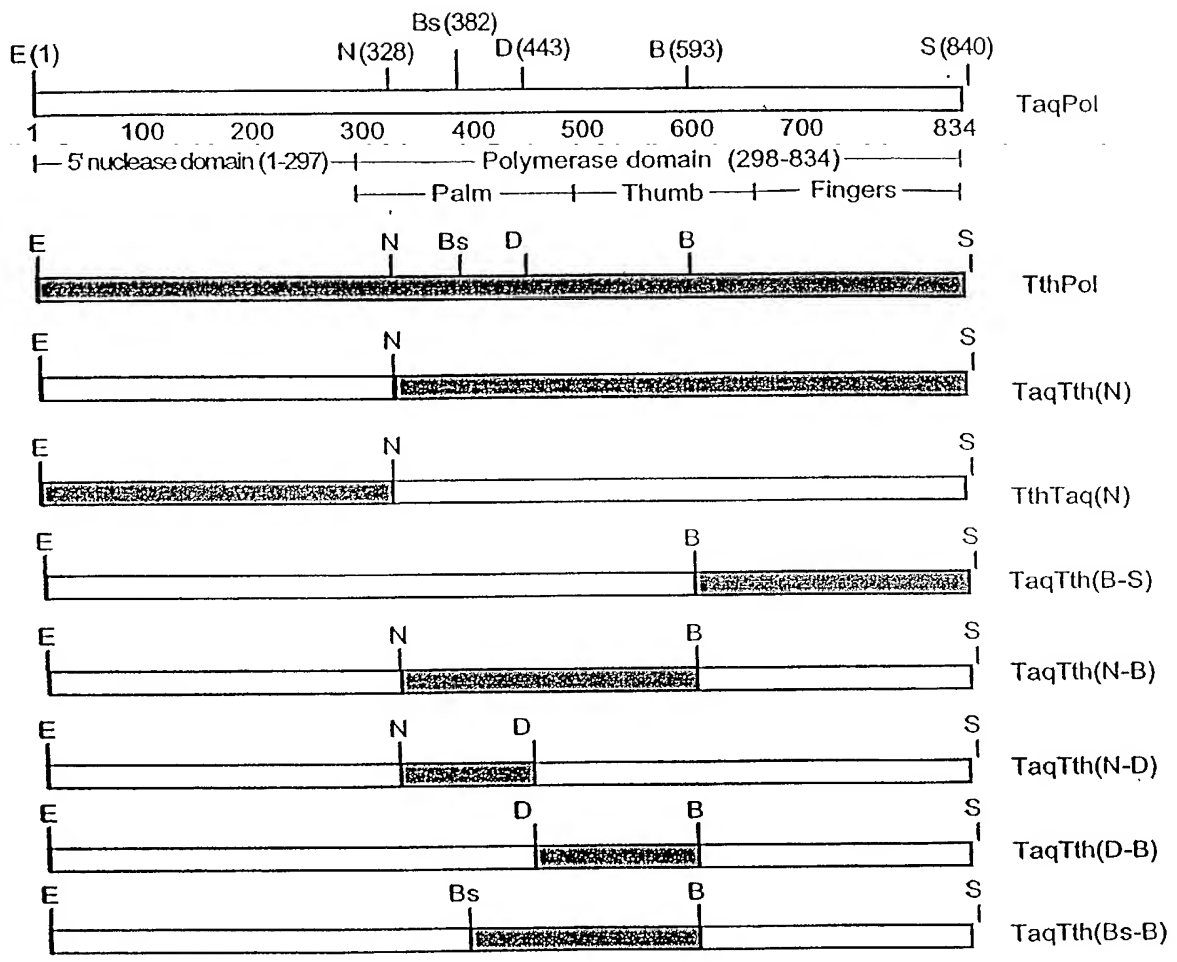


FIGURE 7



FIGURE 8C

MAJORITY [SEQ ID NO:156] TCGAGGGCCGACATGGAXGACCTGAXGCTCTCCTCGGAGCTXTCCAGGTTGGCCACCGACCTGGCCCTGGA

DNAPTAQ [SEQ ID NO:153]...T...C..T...A...C..GG..A... 764
DNAPTFL [SEQ ID NO:154]...GGG...G..C...GGC..T...C..A...T...A...T... 761
DNAPTTH [SEQ ID NO:155]...A...G...A...C..G...T...C...G...C... 770

MAJORITY GGTGGACTTCGGCAAGXGGGGGAGGGCCGACGGGGAGGGGCTTAGGGCCCTTCTGGAGAGGCTGGAGTTT

DNAPTAQAA.....A.....T..... 834
DNAPTFLGG.G.C.C..CACA...A...T...T...GG...T...T...C..T... 831
DNAPTTHG...C..G.....C.....C..... 840

MAJORITY GGCAGCCTCCTCCAGGAGTTGGGCTCCTGGAGGGGGCCCAAGGGCCCTGGAGGAGGGCCCTGGCCCGCCCG

DNAPTAQT...AA..... 904
DNAPTFLA.....G...G...GGCA.....T... 901
DNAPTTHG.....G...GGCC..... 910

MAJORITY CGGAAGGGGCGCTTCGTGGGCTTTGTCCTTTCGGGGGGGGAGCCCATGTGGCCGAGGCTTCTGGCCCTGGC

DNAPTAQG.....AAG.....T..... 974
DNAPTFLT..TT.....TC.T.....T..... 971
DNAPTTHG.....C.....G.....AAA..... 980

MAJORITY CGCCGCGCAGGGCGGGGTCCAGCGGGGCGAGAGCCGCTTAXGGGCGCTXAGGGACCTXAAGGAGGTG

DNAPTAQG.....C..C..G..T.A..AA.C..C.....G..... 1044
DNAPTFL T.GG..GT.....G..CG...T.....A.....C...G.....T...G... 1041
DNAPTTHTC.....C.....G.....G.....GGC...G..A.A.....C..... 1050



FIGURE 8E

MAJORITY [SEQ ID NO:156] GGAGATCGCGCGCGCTGGAGGAGGAGGTCTTCCGGCGCTGGCGCGCGCGCGCGCTTCAAGCTCAACTCCCGGGGAG

DNAPTAQ [SEQ ID NO:153].....GC.....GC.....1464
DNAPTFL [SEQ ID NO:154].....G.G.....AG..G.....1461
DNAPTTH [SEQ ID NO:155].....T.....G.....1470

MAJORITY CAGCTGGAAGGGTGCTCTTTGACGAGGCTXGGGGCTTCCGGCGCATCGGCAAGACGGGAGACXGGCAAGC

DNAPTAQC.....A.....C.....1534
DNAPTFLGC.....G..G..G..T.....G..G..A. 1531
DNAPTTHTA.....T.G..G.....C.A.....A. 1540

MAJORITY GCTCCAGCAGCGCGCGCTGCTGGAGGCGCTXCGAGGCGCGCGCGCATCGTGGAGAGATCCTGCAGTA

DNAPTAQC.....C..C.....1604
DNAPTFLT.....G..A.....CGGC.....1601
DNAPTTHG.....A..G.....G...G. 1610

MAJORITY CCGCGAGCTCAGCAAGCTCAAGAACACCTACATXGAGCGCGCTGCGXGCGCTCGTCCAGCGCGAGCGCGG

DNAPTAQG...G.....T.....G.A...A.....1674
DNAPTFLA.....C.G...G.....A...C... 1671
DNAPTTHG.G.....G..AAG.....G.....1680

MAJORITY CGCCTCCACACCGCGCTTCAAGCAGAGCGGCGCACGGCGCGCGCTTAGTGGTCCGAGCGCGCAAGCTGC

DNAPTAQA.....T.....C. 1744
DNAPTFLG.....C.....TGG.....1741
DNAPTTHG.....G.....1750

FIGURE 8E, continued



FIGURE 8G

MAJORITY [SEQ ID NO:150] AGCTTCCCAAGGTGGGGGCTGGATTGAGAAAGACCTGGAGGAGGGCAGGGGGGTACGTGGAGA
DNAPTAQ [SEQ ID NO:153] 2164
DNAPTFL [SEQ ID NO:154] A GG C C T 2161
DNAPTTH [SEQ ID NO:155] A A G A C A 2170

MAJORITY GCGTCTTGGGGGGGGGGCTAGCTGCCCGACCTCAACGCCCGGGTGAAGAGCGTGGGGGAGGGGGGGGA
DNAPTAQ C A AG G C 2234
DNAPTFL T C G 2231
DNAPTTH AA AA CA C 2240

MAJORITY GCGCATGGCCCTCAACATGCCCGTGCAGGGCCACCGGGGGGACCTCATGAAGCTGGCCCATGGTGAAGCTC
DNAPTAQ T T 2304
DNAPTFL G GG T 2301
DNAPTTH C C 2310

MAJORITY TTCCCGCGGCTXCAGGAAATGGGGGGCCAGGATGGTCCCTXCAGGTCACGACGAGGCTGGTCCCTCGAGGGGGG
DNAPTAQ A GG T T 2374
DNAPTFL T C G TT G G 2371
DNAPTTH C C G C C CC G 2380

MAJORITY CCAAAGAGCGGGGGGAGGGXGGTGGCGCGCTTTGGCCCAAGGAGGCTCATGGAGGGGGGTCTATCCCGCTGGGGGT
DNAPTAQ A A GG C G 2444
DNAPTFL G C AG A GG GAG 2441
DNAPTTH C C C A G AA C C 2450

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000



FIGURE 8H

MAJORITY [SEQ ID NO:156] GCGCCCTGGAGCGTGGAGCGTGGGCGATCGCGCGAGGAGCTGGCTCTCGGCGCAAGGAGTAG

DNAPTAQ [SEQ ID NO:153]A.....GA

DNAPTFL [SEQ ID NO:154]CC.....

DNAPTTH [SEQ ID NO:155]T.....GT...

2499
2496
2505

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

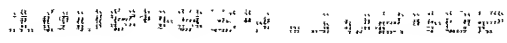


FIGURE 9A

MAJORITY [SEQ ID NO:159] MXAML PLFEPKGRVLLVDGHHLAYRTFEALKGLTTSRGEPVQAVYGFAGKSLLKALKEGG- DAVXVVVFDAK	
TAQ PRO	[SEQ ID NO:157] RG.....H.....I.....69
TFL PRO	[SEQ ID NO:158].....V.V.....68
TTH PRO	[SEQ ID NO:1] E.....YK.F.....70
MAJORITY APSFRHEAYEYKAGRAPTPEDFPROLALIKELVDLLGLXRLEVPGEADDVLTATLAKKAEKEGYEVRI L	
TAQ PRO	.....GG.....A.....S.....139
TFL PRO	.....V.....F.....R.....138
TTH PRO	.....FT.....140
MAJORITY TADRDLYQLLSDRHVLHPEGYLITPAWLWEKYGLRPEOWUDYRALXGDPDSNLPQVKGI GEKTAAXKLLX	
TAQ PRO	.....K.....H.....D.A.....T.E.....R...E 209
TFL PRO	.....E...I.....Y.....A.....I.....QR..R 208
TTH PRO	.....V...V.....H...E.....F...V.....L...K 210
MAJORITY EWGSLNLLKNLDRVKP-XXREKIXAHMEDLXLSXXLSXVRTDLPLEVDFAXRREPDREGLRAFLERLEF	
TAQ PRO	.....A.....L...AI...L...D...K..WD.AK.....K.....R.....278
TFL PRO	.....FOH...Q...SL...LQ.G..A.A..RK..Q.H.....GR..T..NL.....277
TTH PRO	.....ENV.....K..L...R..LE..R.....L.QG.....280
MAJORITY GSLLHEFGLEXPKALEEAPWPPPEGAFVGFVLSRPEPMVAELLALAAARXGRVHRAXDPLXGLRDLKEV	
TAQ PRO	.....S.....K.....D.....G.....PE.YKA.....A 348
TFL PRO	.....G...A.....L..SF.....G.WE..L...Q...R.....G. 347
TTH PRO	.....A.AP.....K...C.D.....A...A..K.....350



FIGURE 9B

MAJORITY [SEQ ID NO:159] RGLAKDLAVLALREGLDLXPGDDPML LAYLLDPSNTIPEGVARRYGGWETEDAGERALLSERLFXNLXX

TAQ PRO [SEQ ID NO:157] S S G P E A A WG 418
TFL PRO [SEQ ID NO:158] I F E A A QT KE 417
TTH PRO [SEQ ID NO:1] S V AH HR LK 420

MAJORITY RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLDVAYLQALSLEVAEEI(RR)LEEEVFRLAGHPFNLNSRD

TAQ PRO R R A R A A 488
TFL PRO K E R EA V Q 487
TTH PRO K H L 490

MAJORITY QLERVLFDELGLPAIGKTEKTKRSTSAAVLEALREAHPIVEKILQYRELTCLKNTYIDPLPLVHPRTG

TAQ PRO 558
TFL PRO DR S D I 557
TTH PRO R L Q H V S 560

MAJORITY RLHTRFNOTATATGR LSSSDPNLQNI PURTPLGORI RRAFVAEEGWXLVALDYSOIELRVLAHLSGDENL

TAQ PRO 628
TFL PRO V V V 627
TTH PRO A A A 630

MAJORITY IRVFOEGRDIHTOTASWMFGVPPEAVDPLMRRAAKTI NFGVLYGMSAHLRSOELAIPEYEEAVAFIERYFO

TAQ PRO 698
TFL PRO E R Q 697
TTH PRO S G S V 700



FIGURE 9C

MAJORITY [SEQ ID NO:159] SFPKVRWIEKTL EGGRRRGYVETLFGRRRYVPDLNARVKSUREAAERMAFNMPVQGT AADL MKLAMVKL

TAQ PRO	[SEQ ID NO:157]	.....E.....	768
TFL PRO	[SEQ ID NO:158].Y.....	.....R.....	767
TTH PRO	[SEQ ID NO:1]	.....K.....	770

MAJORITY FPRLEXMSARM LQVHDELVL EAPKXRAEXVAALAKEVME GUYPLAVPLEVEVGXGEDWLSAKEX

TAQ PRO	.....E.....	.....E.....A.....R.....	.....I.....	833
TFL PRO	.....Q.L.....	.....D.....R.....	.....W.Q.....	831
TTH PRO	.....R.....	.....L.....QA.....E.....	.....A.KA.....	835

XXXXXXXXXXXXXXXXXXXX

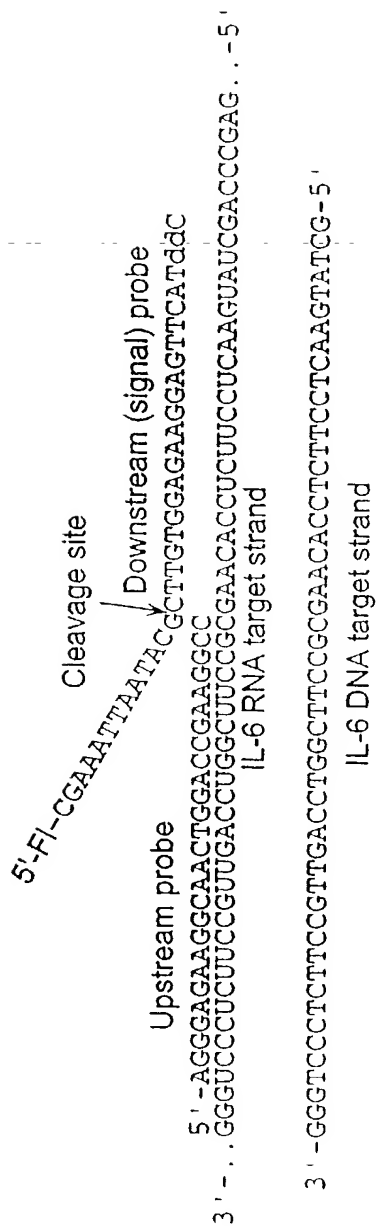
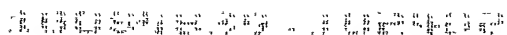


FIGURE 10



DNA

B

RNA

FIGURE 11



	BstBI (382)		NdeI (443)	
1 TaqPol	390	400	410	420
2 TthPol	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLLENNLWRRLEGEERLLWLYREVERPLSLVLAHMEATGVRLEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLLENNLWRRLEGEERLLWLYREVERPLSLVLAHMEATGVRLEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLLENNLWRRLEGEERLLWLYREVERPLSLVLAHMEATGVRLEDVAYLQALS	DPSNTTPEGVARRYGGEWTEEAAGRAALSERLLENNLWRRLEGEERLLWLYREVERPLSLVLAHMEATGVRLEDVAYLQALS
	470	480	490	500
1 TaqPol	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK
2 TthPol	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK	LEVAEEIIRLEAEVEFRLAGHPFNLSRDQLERVLFDDELPLPAIGKTKTGKRRSTSAAVLEALREAHPIVEKILQVRELTK
	550	560	570	580
1 TaqPol	LKSTYIDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKSTYIDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI
2 TthPol	LKNTYVDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKNTYVDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKNTYVDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI	LKNTYVDPLPLHLHPRTGRLHTRFNQTATATGRLSSSDPNLQNIPIVPTPLGQRI

FIGURE 13

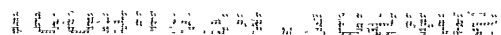


FIGURE 14



XXXXXXXXXX 15.59 11/29/02

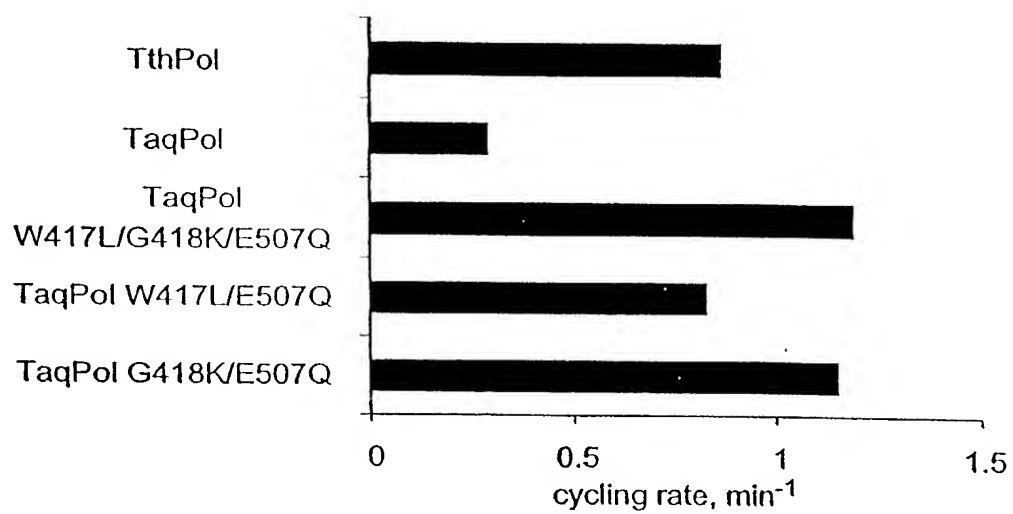


FIGURE 15



2002/10/24 10:00:00


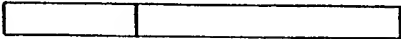


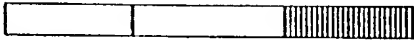
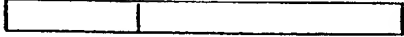
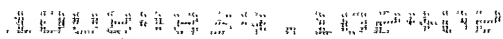
		Polymerase Activity Assays	
		% Fl-labeled dUTP incorporated	
		<u>RNA, p(A) or DNA, p(dA) Template</u>	
Nuclease Domain	Polymerase Domain		
Tth		5.8 (1.00)	14.8 (1.00)
Taq		0.8 (0.14)	15.0 (1.01)
TaqTth(N)		4.88 (0.84)	12.9 (0.87)
TaqTth(N-B)		0.58 (0.10)	13.3 (0.90)
TaqTth(B-S)		6.60 (1.14)	14.9 (1.01)
Taq(W417L/G418K/E507Q)		0.42 (0.07)	12.6 (0.85)

FIGURE 16



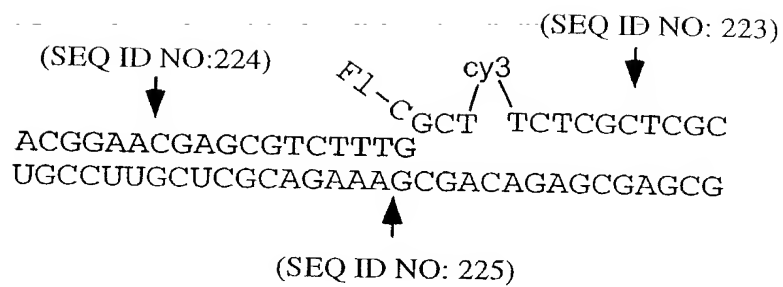


FIGURE 18A

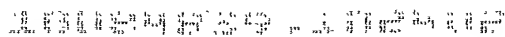


FIGURE 18B

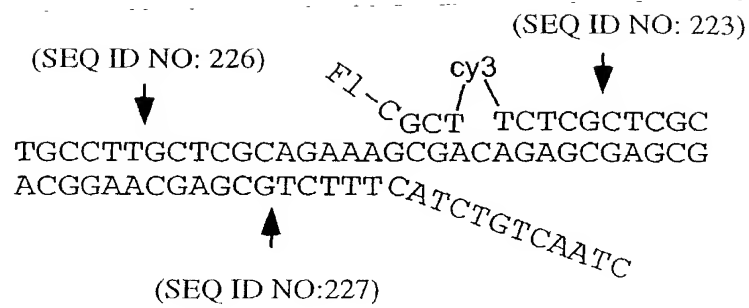
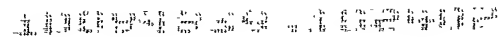
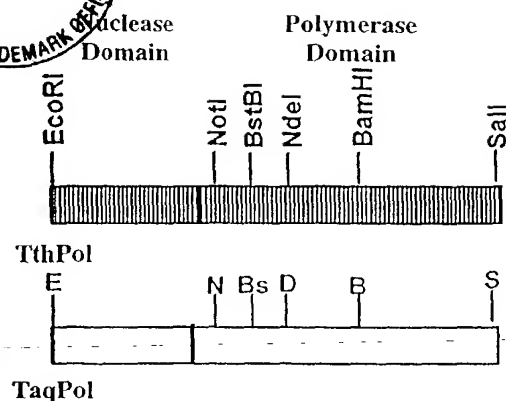


FIGURE 18C



	Turnover Rate (1/min) (Relative Rate)		
	IL-6 RNA Invader Assay	Synthetic r25mer Invader Assay	Synthetic IrT1 Invader Assay
TthPol	0.86 (1.00)	0.29 (1.00)	1.85 (1.00)
TaqPol	0.29 (0.32)	0.03 (0.10)	0.05 (0.03)
TaqTth(N)	0.86 (1.00)	0.45 (1.56)	3.36 (1.81)
TthTaq(N)	0.33 (0.38)	0.03 (0.10)	0.00 (0.00)
TaqTth(B-S)	0.57 (0.67)	0.07 (0.23)	0.15 (0.08)
TthTaq(B-S)	0.70 (0.79)	0.30 (1.05)	1.70 (0.92)
TaqTth(N-B)	1.41 (1.59)	0.40 (1.38)	3.22 (1.74)
TthTaq(N-B)	0.22 (0.25)	0.05 (0.18)	0.05 (0.03)
TaqTth(N-Bs)	0.22 (0.25)	0.10 (0.11)	0.06 (0.03)
TaqTth(Bs-B)	0.89 (1.04)	0.18 (0.63)	0.71 (0.38)
TaqTth(N-D)	0.33 (0.38)	0.08 (0.29)	0.18 (0.10)
TaqTth(D-B)	0.32 (0.42)	0.16 (0.54)	0.16 (0.09)

FIGURE 19

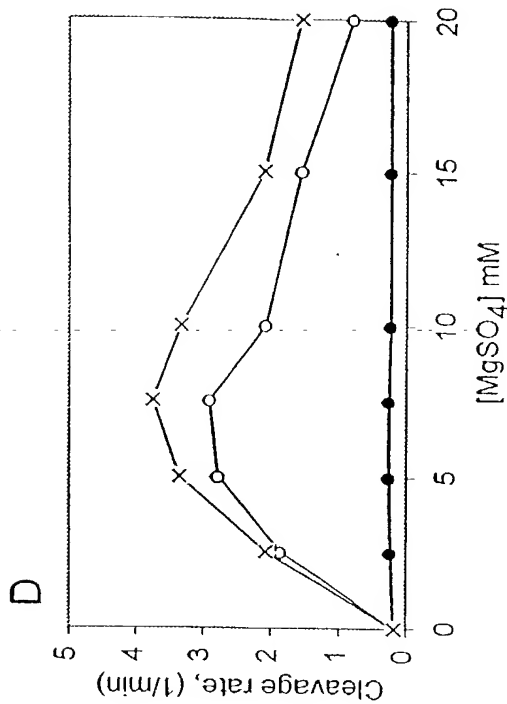
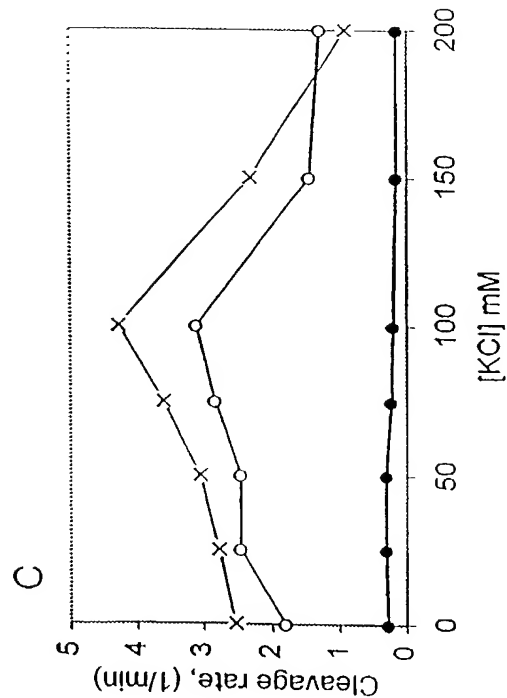
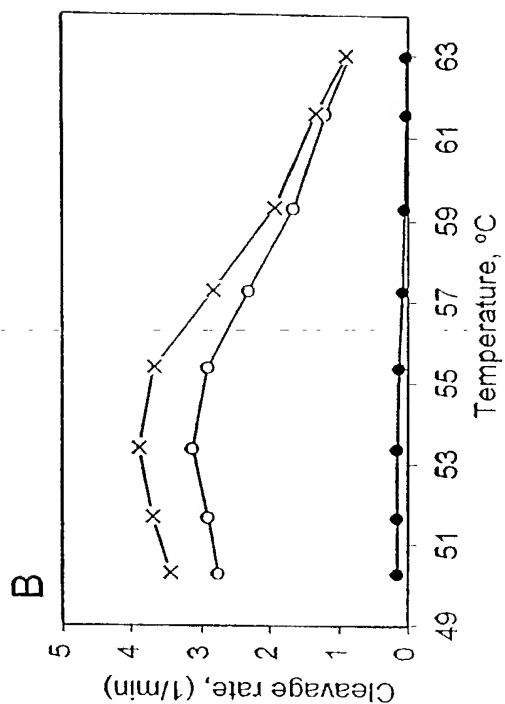
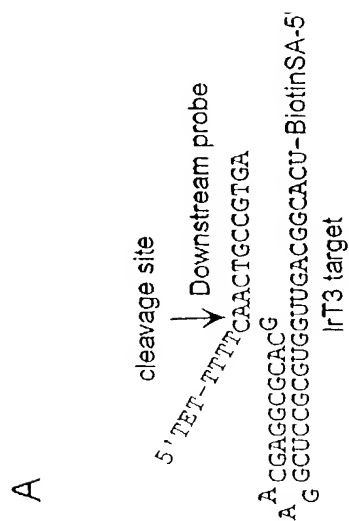
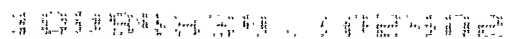


FIGURE 20

www.ips.com



A

B

5'-tet-TTTCAACTGCCGTGA
A CGAGGCGCACC
A GCUCCGCGUGGUUGACGGCACU-BiotinSA-5'



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FIGURE 22

A

(SEQ ID NO: 230)



3' NH4-AATTGCTCCGCGTGGTTGACGAAGGAGGC-5'

5'-F1-TCCTTCT CAACTGCTTCCTCCG-3'



(SEQ ID NO: 231)

B

(SEQ ID NO: 232)



5'-AACGAGGCGCACCTCAAATCTCCCTT-biotin

3' NH4-AATTGCTCCGCGTGGTTGACGAAGGAGGC-5'

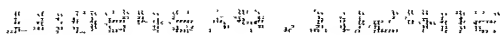
(SEQ ID NO 230)



5'-F1-TCCTTCT CAACTGCTTCCTCCG-3'



(SEQ ID NO: 231)



(SEQ ID NO: 235)
↓
5' -ACGAGCGTCTTT^GCGCTGTCTCGCT
TTGCTCGCAGAAA — GCGACAGAGCGA-F1-5'
↑
(SEQ ID NO: 233)



FIGURE 24

A

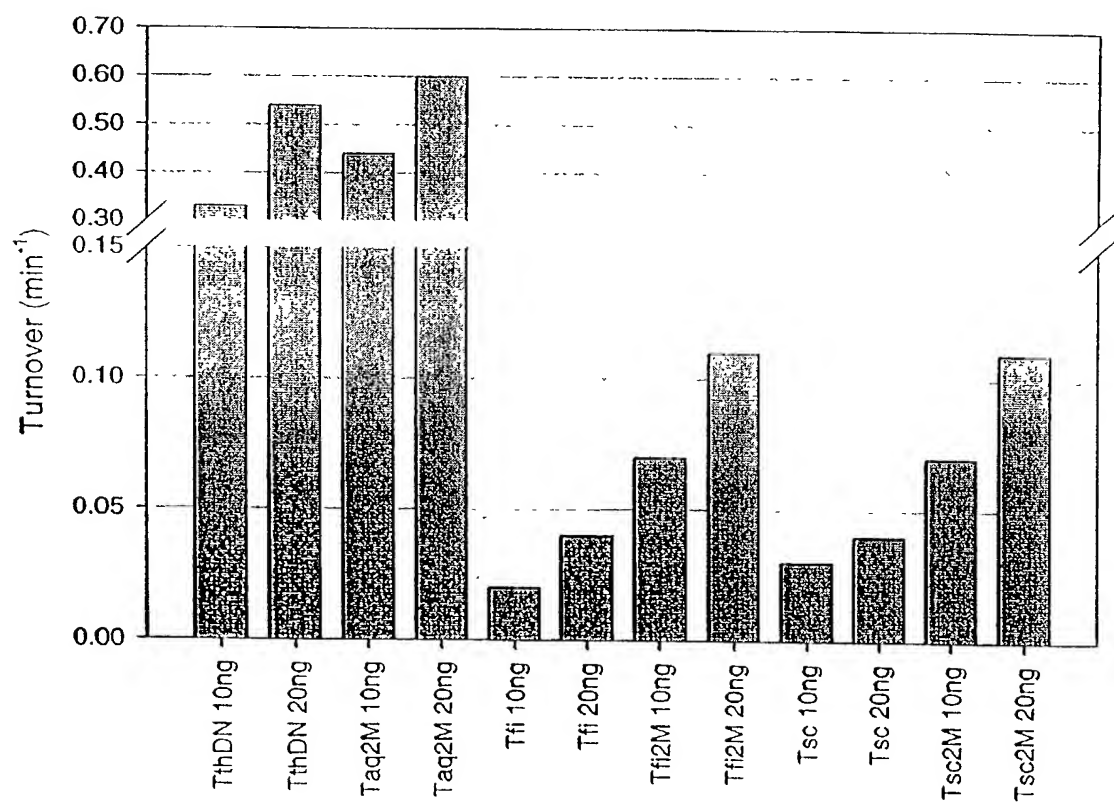


B





FIGURE 25



a

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

b

81-69-5

5' GCTTGACGGGGAAAGCCGGCGAACGTGGCG

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

89-15-1

5' 3'

c

81-69-4

5' CTTGACGGGGAAAGCCGGCGAACGTGGCGA

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

89-15-1

5' 3'

d

81-69-3

5' TGACGGGGAAAGCCGGCGAACGTGGCGGAGA

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

89-15-1

5' 3'

e

81-69-2

5' ACGGGGAAAGCCGGCGAACGTGGCGAGAAA

CGAACTGCCCCCTTTCGGCCGCTTGCACCGCTCTTTCCCTTCCCTTCTTTTCGCTT

M13mp18

5' 3'

89-15-1

5' 3'



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FIGURE 27

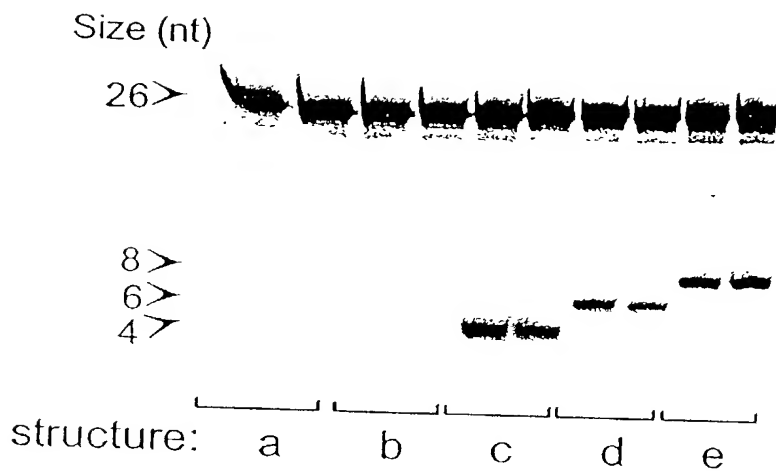
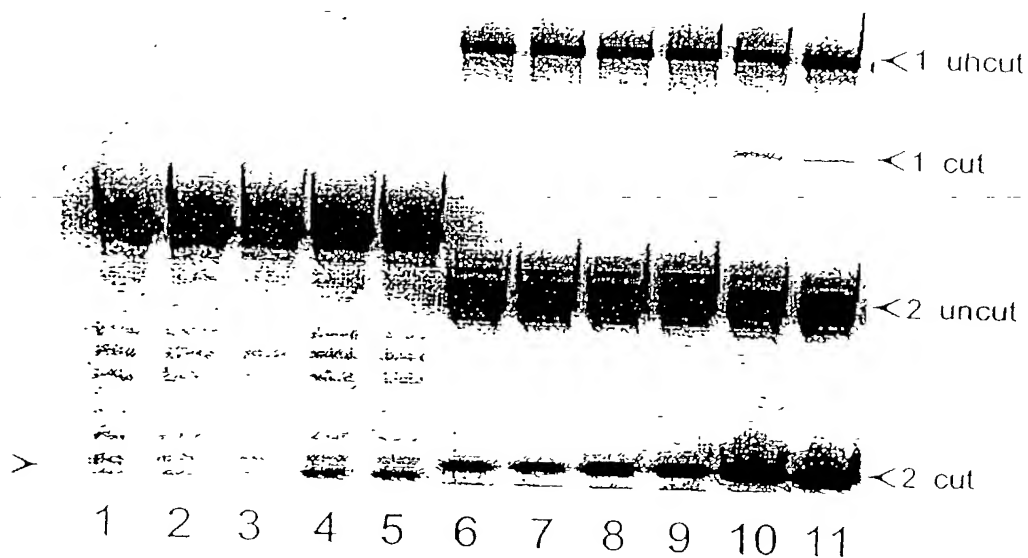




FIGURE 28

a



b

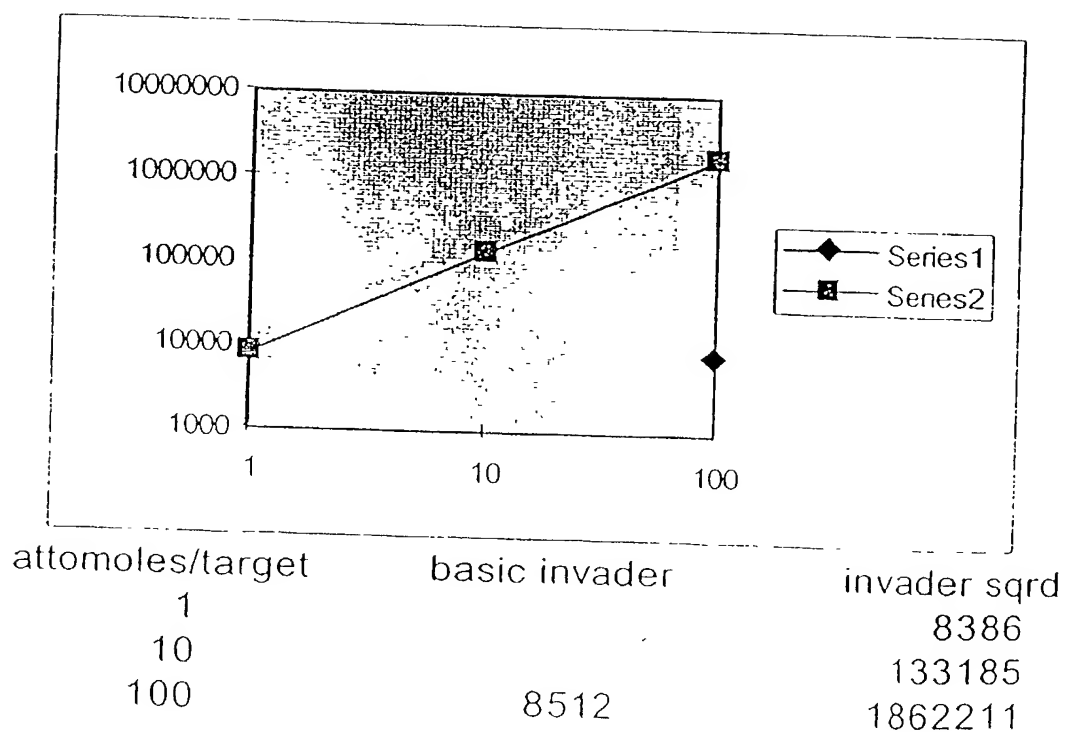




FIGURE 29

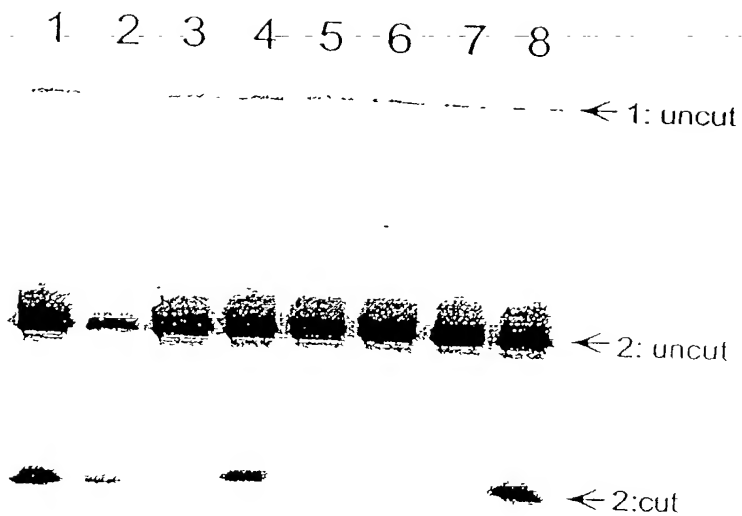




FIGURE 30

Cleavage site
 5' *FL*-TTT **Y** CCTCTCCTCTCTTCC-3'
 89-44 89-76
 5' ACACAGTGTCTCCCGTCTCCTCTGAGCA
 3'-ACTGTCTGTCTACAGGAGGCGGAGGACTCGTGGAGGAGGAGGAGTA-5'
 3110 HCMV Target Sequence 3057



FIGURE 31

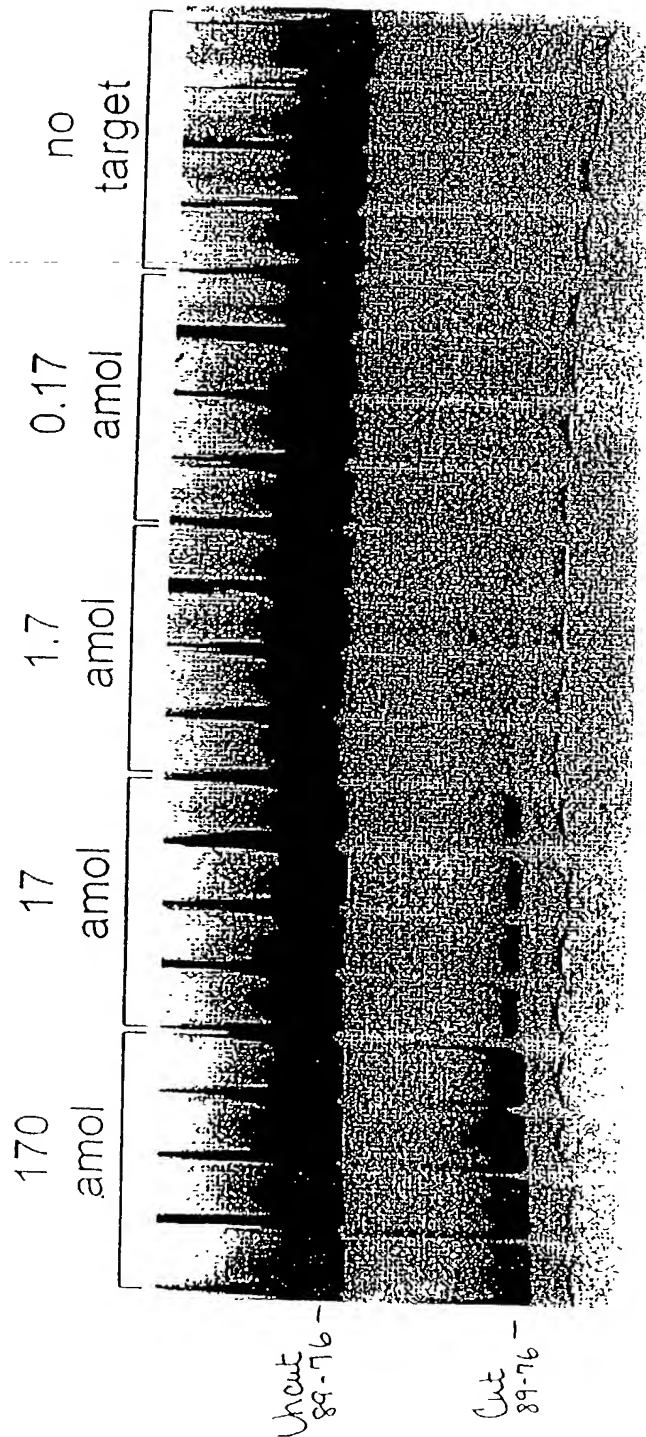
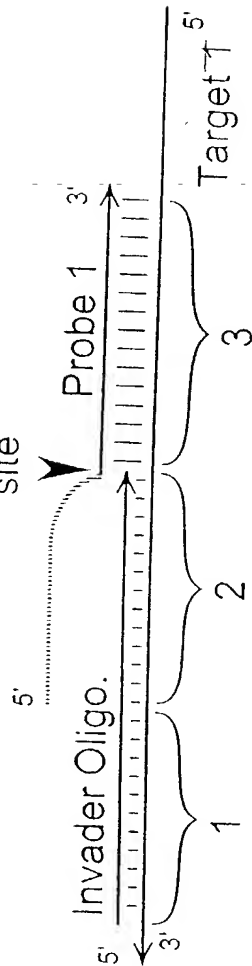
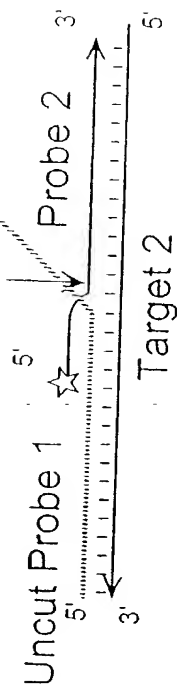


FIGURE 32

Cleavage site



Background cleavage site



Cleavage site

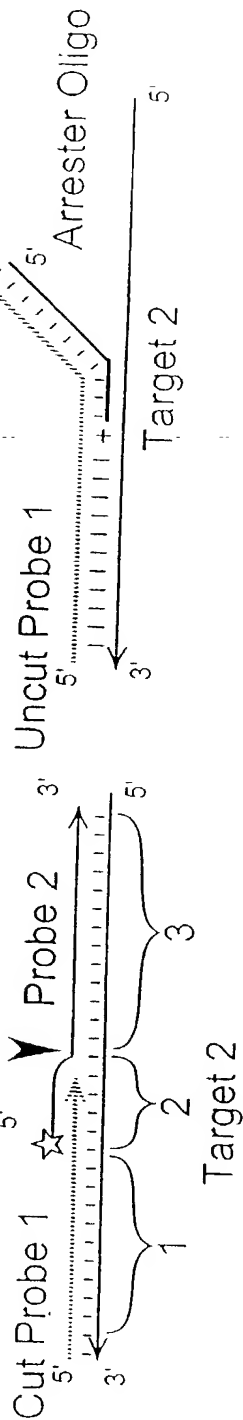
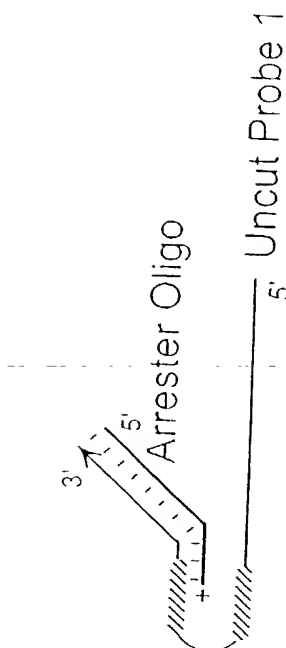
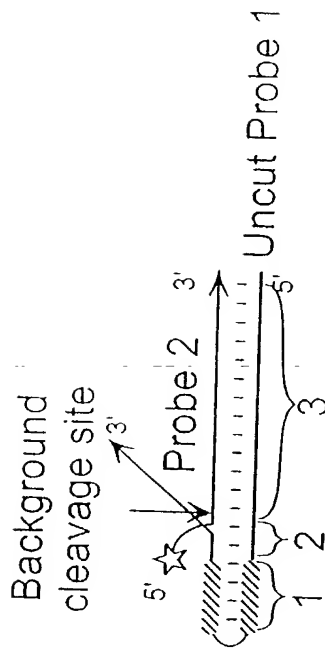
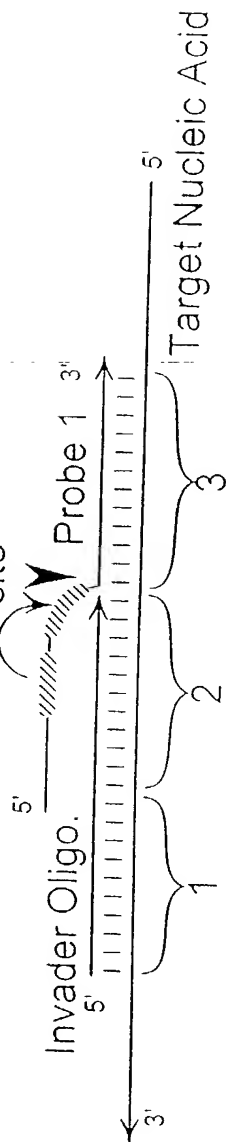
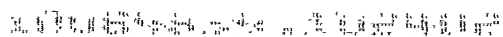


FIGURE 33

Cleavage site





1 2 3 4 5 6 7 8 9 10

21 22 23 24 25 26 27 28 29 30

C



FIGURE 35A

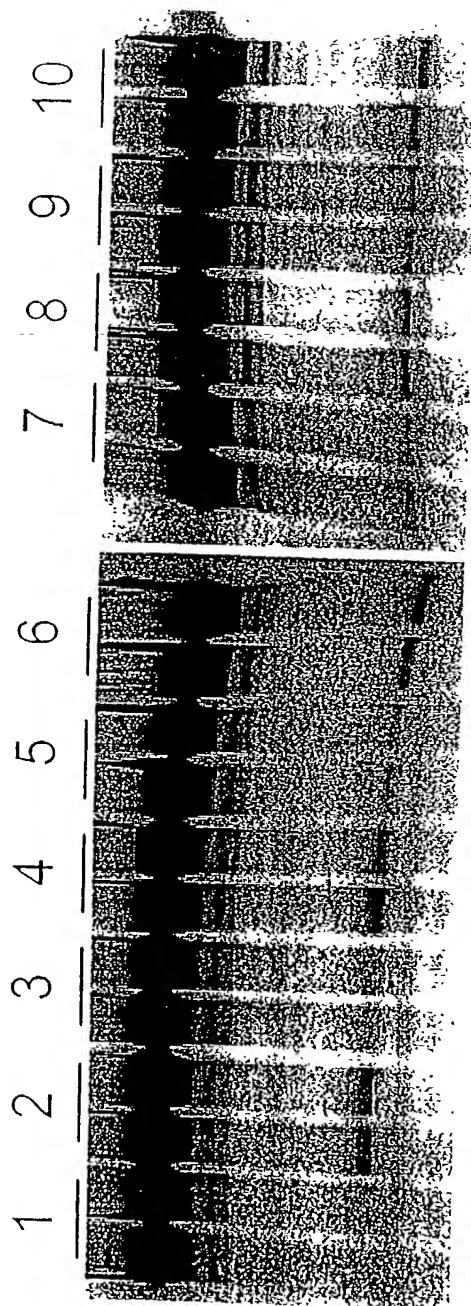
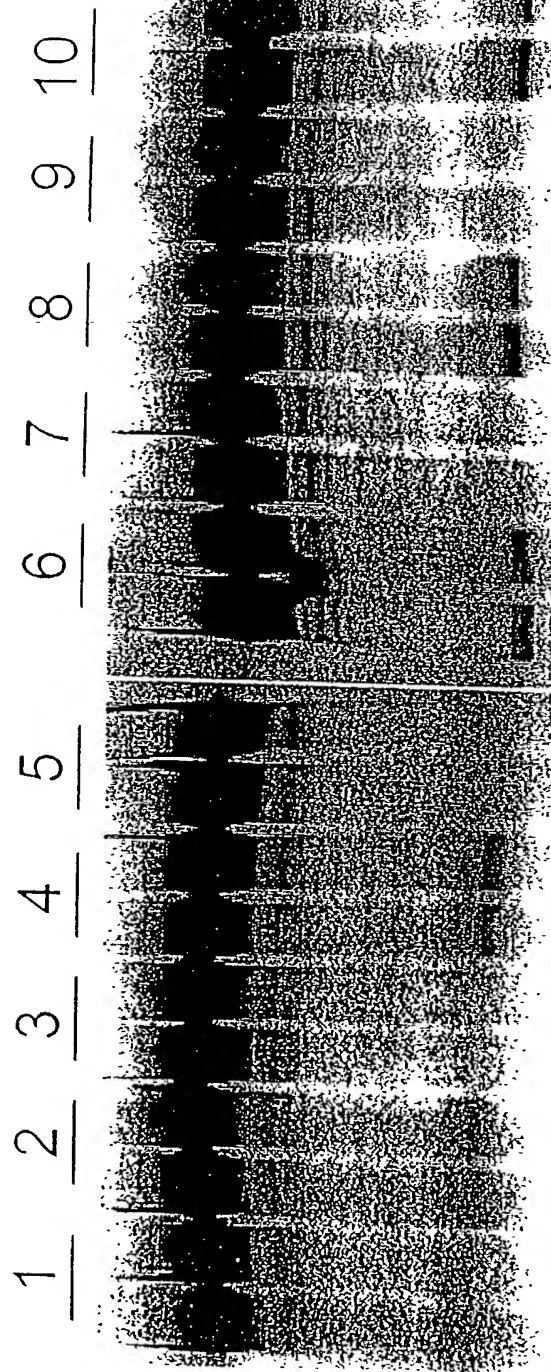




FIGURE 35B



11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

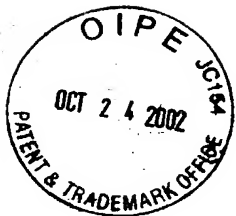
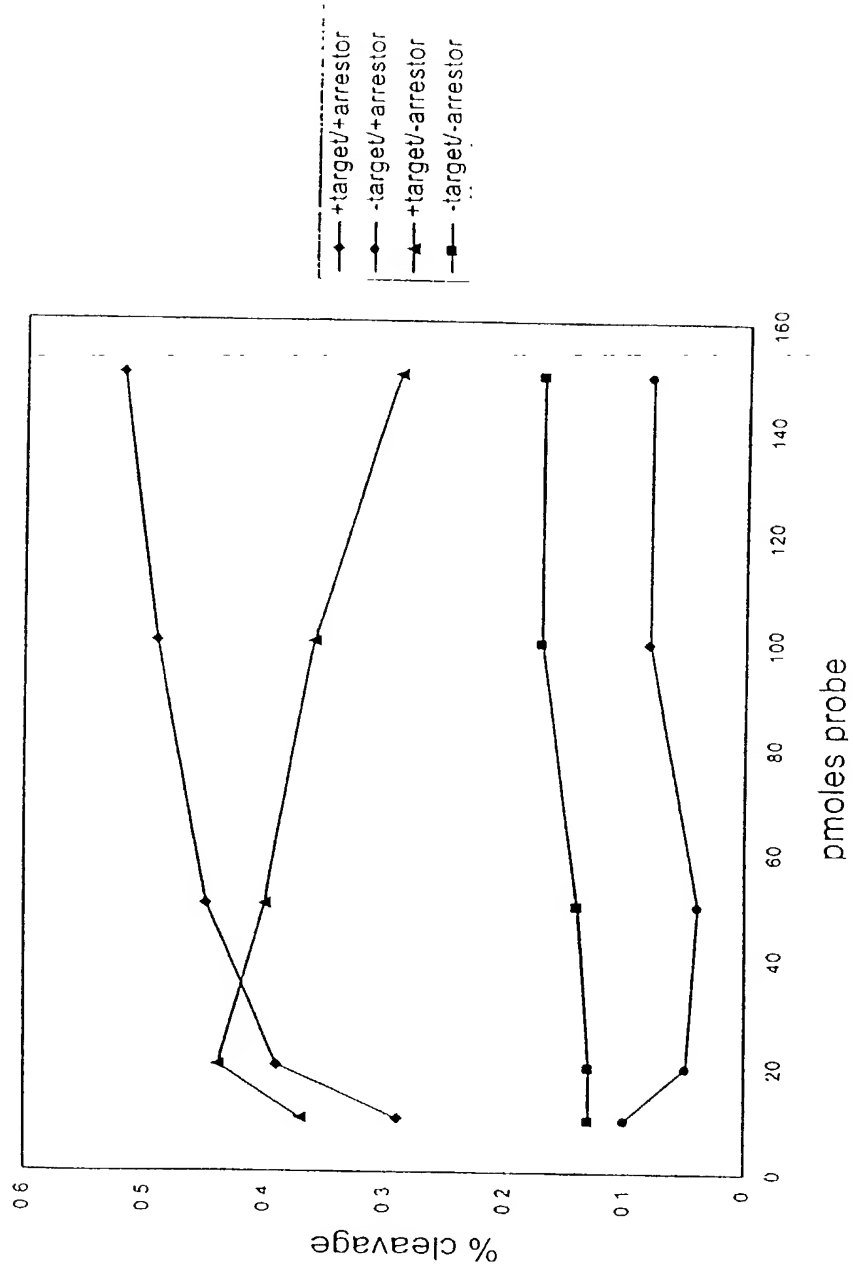


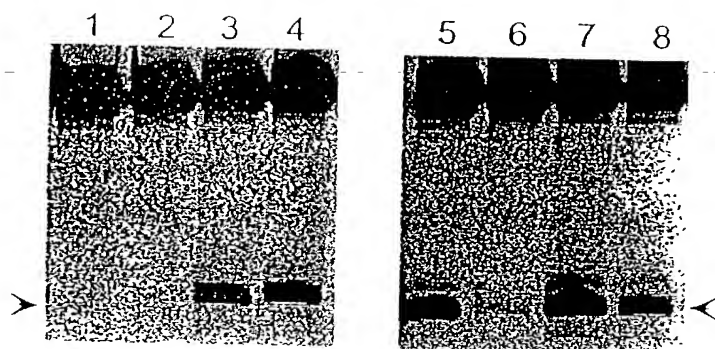
FIGURE 35C





XXXXXXXXXXXXXXXXXXXX

FIGURE 36A





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FIGURE 36B

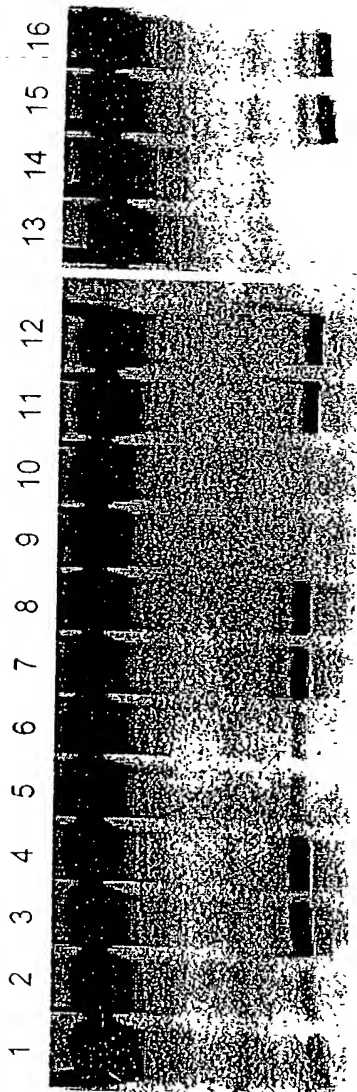




FIGURE 37A

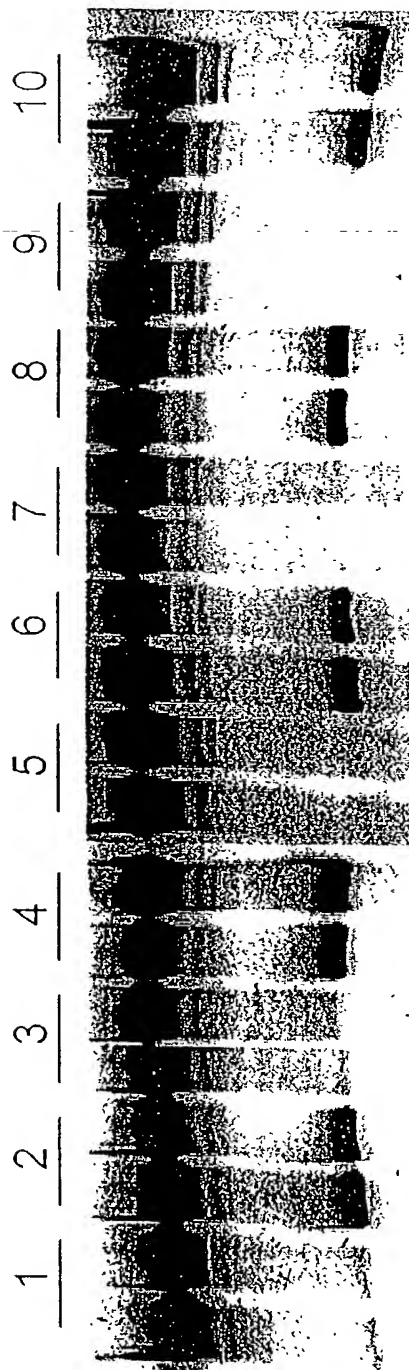




FIGURE 37B

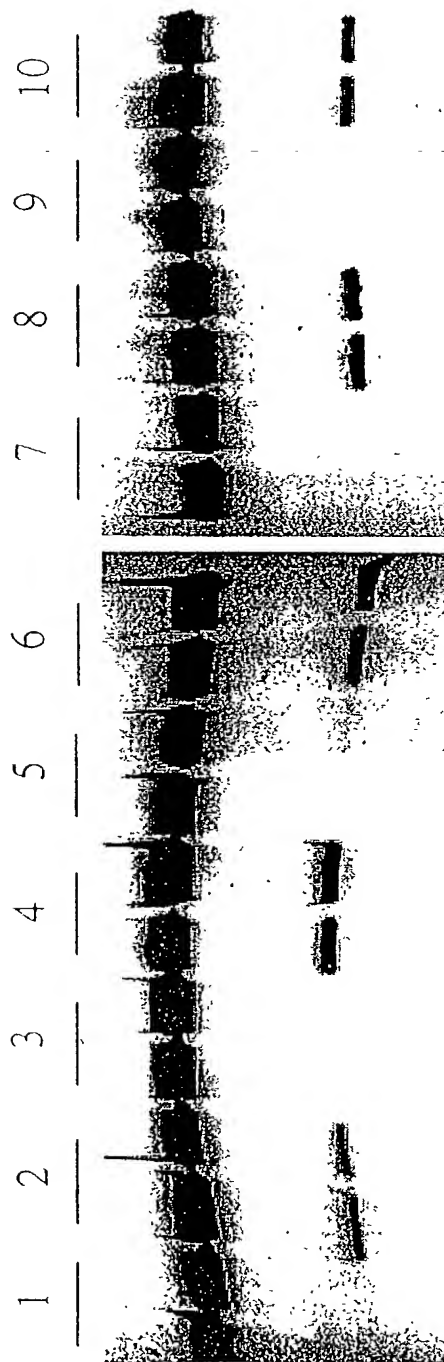
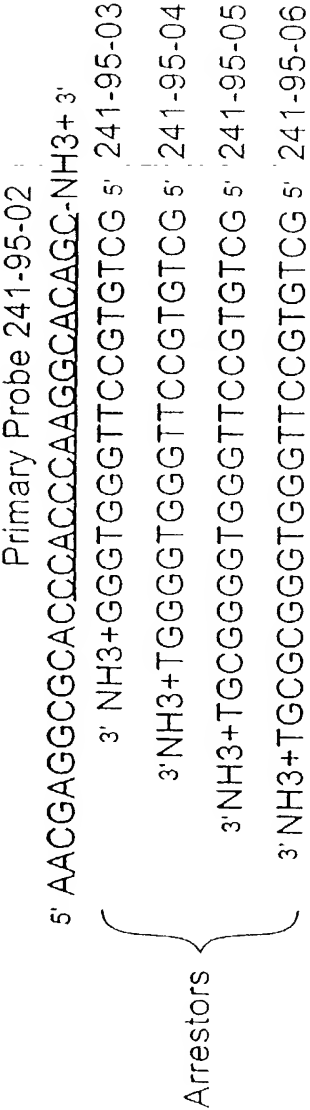


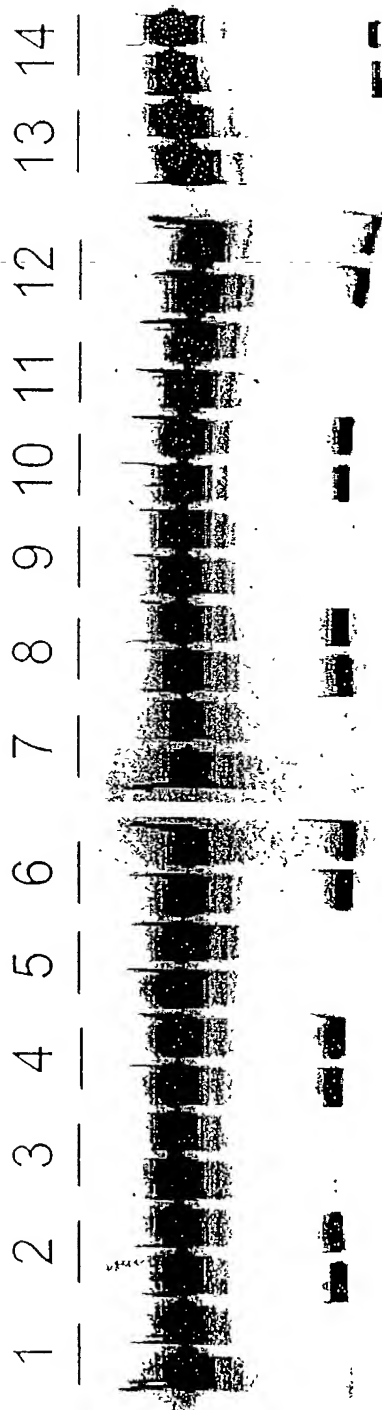
FIGURE 37C

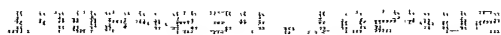


5' AACGAGGGCGCACCCACCCCAAGGCACAGC-NH3+ 3'



FIGURE 38





— 7 —





FIGURE 40

	1	2	3	4	5	6	7	8	9	10	11	12
A	Negative Control	No Target Control	Sample 1	Sample 1	Sample 9	Sample 9	Sample 17	Sample 17	Sample 25	Sample 25	Sample 33	Sample 33
B	No Target Control	No Target Control	Sample 2	Sample 2	Sample 10	Sample 10	Sample 18	Sample 18	Sample 26	Sample 26	Sample 34	Sample 34
C	Standard 1	Standard 1	Sample 3	Sample 3	Sample 11	Sample 11	Sample 19	Sample 19	Sample 27	Sample 27	Sample 35	Sample 35
D	Standard 2	Standard 2	Sample 4	Sample 4	Sample 12	Sample 12	Sample 20	Sample 20	Sample 28	Sample 28	Sample 36	Sample 36
E	Standard 3	Standard 3	Sample 5	Sample 5	Sample 13	Sample 13	Sample 21	Sample 21	Sample 29	Sample 29	Sample 37	Sample 37
F	Standard 4	Standard 4	Sample 6	Sample 6	Sample 14	Sample 14	Sample 22	Sample 22	Sample 30	Sample 30	Sample 38	Sample 38
G	Standard 5	Standard 5	Sample 7	Sample 7	Sample 15	Sample 15	Sample 23	Sample 23	Sample 31	Sample 31	Sample 39	Sample 39
H	Standard 6	Standard 6	Sample 8	Sample 8	Sample 16	Sample 16	Sample 24	Sample 24	Sample 32	Sample 32	Sample 40	Sample 40

hTGF- β

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC CAC GGC TC -3'
5'-AGG CGA AAG CCC TCA ATT TCC CA-3'
5'-AAC CAC TGC CGC ACA-3'
5'-GAG CCG TGG AGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:185)
(SEQ ID NO:186)
(SEQ ID NO:187)
(SEQ ID NO:188)
(SEQ ID NO:189)
(SEQ ID NO:190)

hMCP-1

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3'
5'-GGG TTG TGG AGT GAG TGT TCA AGT A -3'
NO STACKER
5'-GGG-AAA-CTC-CGA-AGG-AGG-CG-3'
5'-FL-CAC-Z28-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:191)
(SEQ ID NO:192)
(SEQ ID NO:193)
(SEQ ID NO:189)
(SEQ ID NO:190)

hTNF- α

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'
5'-TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'
5'-GGG CCA GAG GG-3'
5'-AGG CAG TCA GAG AGG CG-3'
5'-FL-CAC-Z28-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:194)
(SEQ ID NO:195)
(SEQ ID NO:196)
(SEQ ID NO:197)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-6

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC ATT GAA TTNH2-3'
5'-CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'
5'-CAG ATT GGA AGC ATC CAT CT-3'
5'-GAT TCA ATG AGG AGG AGG C-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:198)
(SEQ ID NO:199)
(SEQ ID NO:200)
(SEQ ID NO:201)
(SEQ ID NO:189)
(SEQ ID NO:190)

Patent & Trademark Office





hIL-1 β

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH2-3'
5'-CAG GTC CTG GAA GGA GCA CTT A-3'
5'-GCC ATC AGC TTC TTT GTT CTT GTC ATC-3'
5'-GCC CTA AAC AGA TGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)
(SEQ ID NO:203)
(SEQ ID NO:204)
(SEQ ID NO:205)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-2

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH2-3'
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA-3'
5'-CTG TGT TTT CTT TGT AGA AC-3'
5'-CTA CAA CTG GAG GAG GC-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)
(SEQ ID NO:207)
(SEQ ID NO:208)
(SEQ ID NO:209)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-8

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH2-3'
5'-GTG TGG TCC ACT CTC AAT CAA-3'
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'
5'-AGA ACT GAG AGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)
(SEQ ID NO:211)
(SEQ ID NO:619)
(SEQ ID NO:620)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-10

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH2-3'
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'
5'-ATG AGT GAG TTT GGT GCG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)
(SEQ ID NO:622)
(SEQ ID NO:623)
(SEQ ID NO:624)
(SEQ ID NO:189)
(SEQ ID NO:625)

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hIL-4

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CTT GGA GCC A-NH₂-3'
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'
5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'
5'-TGC CTC CAA GGT GCG C-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:626)
(SEQ ID NO:627)
(SEQ ID NO:628)
(SEQ ID NO:629)
(SEQ ID NO:189)
(SEQ ID NO:625)

hIFN- γ

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH₂-3'
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'
5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'
5'-TTA GGC ATT TTG AAG GTG CGC-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:630)
(SEQ ID NO:631)
(SEQ ID NO:632)
(SEQ ID NO:633)
(SEQ ID NO:189)
(SEQ ID NO:625)

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



hCYP 1A2, 1193G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'
5'-GGG ATG TAG AAG CCA TTC AGA-3'
5'-TTG TTG TGC TGT GGG GGA TG-3'
5'-GGG ACA CAA CGG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:634)
(SEQ ID NO:635)
(SEQ ID NO:636)
(SEQ ID NO:637)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 2B6, 343G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'
5'-CGG AAG AAT GGG TCG ACC ATG-3'
5'-GGG ATA TGG TGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:638)
(SEQ ID NO:639)
(SEQ ID NO:640)
(SEQ ID NO:641)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 2C19, 223G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'
5'-GCC TGG AAC GGT GCG C-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:642)
(SEQ ID NO:643)
(SEQ ID NO:644)
(SEQ ID NO:645)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 2C9, 1554T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'
5'-CAG AGG AAA GAG AGC TGC AGG G-3'
5'-GGG CAT TAT CCA TGA GGC G-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:646)
(SEQ ID NO:647)
(SEQ ID NO:648)
(SEQ ID NO:649)
(SEQ ID NO:189)
(SEQ ID NO:190)

Patent & Trademark Office



h/rCYP 1A1 (human: 937, rat 863G)

Primary probe
INVADER oligonucleotide (h)
INVADER oligonucleotide (r)
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'
5'-TCC TGA CAG TGC TCA ATC AGG A-3'
5'-TCC TGA CAA TGC TCA ATG AGG A-3'
5'-GTC CCG GAT GTG GCC C-3'
5'-ATC ACA GAC AGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:666)
(SEQ ID NO:667)
(SEQ ID NO:668)
(SEQ ID NO:669)
(SEQ ID NO:670)
(SEQ ID NO:189)
(SEQ ID NO:190)

h/rCYP 1A2 (813C/819C)

Primary probe
INVADER oligonucleotide (h)
INVADER oligonucleotide (r)
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'
5'-GCA GAA AAC AGT CCG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:671)
(SEQ ID NO:672)
(SEQ ID NO:673)
(SEQ ID NO:674)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 2B1, 1017T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'
5'-ATG ACC GCA GTG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:675)
(SEQ ID NO:676)
(SEQ ID NO:677)
(SEQ ID NO:678)
(SEQ ID NO:189)
(SEQ ID NO:190)

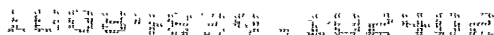
rCYP 2B2, 162T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'
5'-GTG ATT GGC TCT GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:679)
(SEQ ID NO:680)
(SEQ ID NO:681)
(SEQ ID NO:682)
(SEQ ID NO:189)
(SEQ ID NO:190)

11/11/11 11:11:11



Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

(SEQ ID NO:683)
(SEQ ID NO:684)
(SEQ ID NO:685)
(SEQ ID NO:686)
(SEQ ID NO:189)
(SEQ ID NO:190)

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

(SEQ ID NO:687)
(SEQ ID NO:688)
(SEQ ID NO:689)
(SEQ ID NO:690)
(SEQ ID NO:189)
(SEQ ID NO:625)

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

(SEQ ID NO:691)
(SEQ ID NO:692)
(SEQ ID NO:693)
(SEQ ID NO:694)
(SEQ ID NO:189)
(SEQ ID NO:190)

Primary probe
NVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

SEQ ID NO:695)
SEQ ID NO:696)
SEQ ID NO:697)
SEQ ID NO:698)
SEQ ID NO:189)
SEQ ID NO:625)



rCYP 4A2

Primary probe

INVADER oligonucleotide

Stacker

ARRESTOR oligonucleotide

FRET Probe

Secondary target

5'-AAC GAG GCG CAC AGA AGG CCC CTT-NH₂-3'
5'-CCT TGA ACA GCA CCA GAA ATA GAC TGA GCA C-3'
5'-GAG AGA ACC CAG AGA CAC CAT CC-3'
5'-AAG GGG CCT TCT GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:699)
(SEQ ID NO:700)
(SEQ ID NO:701)
(SEQ ID NO:702)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 4A3, 1235C

Primary probe

INVADER oligonucleotide

Stacker

ARRESTOR oligonucleotide

FRET Probe

Secondary target

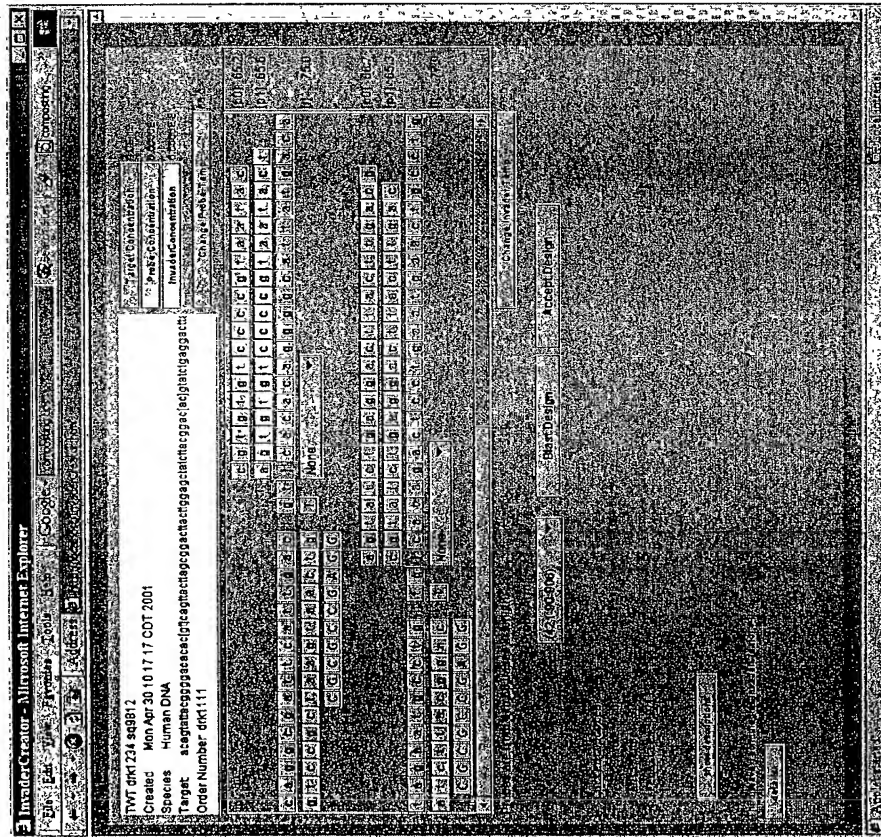
5'-AAC GAG GCG CAC GTT GTG ATA CCT T-NH2-3'
5'-GAT GAA GGC CAT AAA TTA AAA TTG TGC-3'
5'-TGG GTA TGG AAC GTC C-3'
5'-AAG GTA TCA CAA CGT CGC C-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCG TTT-3'

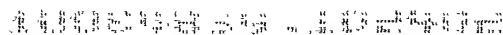
(SEQ ID NO:703)
(SEQ ID NO:704)
(SEQ ID NO:705)
(SEQ ID NO:706)
(SEQ ID NO:189)
(SEQ ID NO:625)

[illegible]



Figure 44



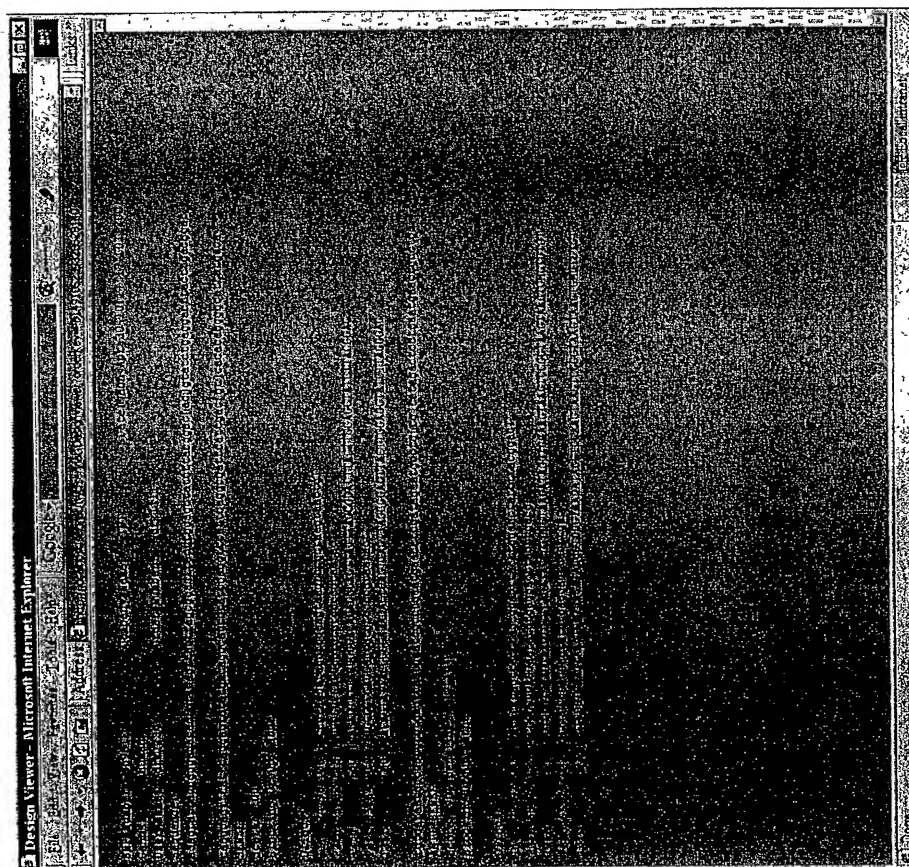


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Figure 46



11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



FIGURE 47

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ()

| Oligo Type | Oligo Sequence (5' to 3') | Modification | SEQ ID NO |
|----------------|--------------------------------------|-----------------------|-----------|
| hTNF- α | | | |
| probe | ccg ccg aga tca ctc tga ctg cct NH2 | 3' Amine | 709 |
| invader | tig tca ctc ggg gtt cga gaa gat gaa | | 710 |
| stacker | ggg cca gag ggc tga tta g | all 2'Ome bases | 711 |
| stacker | ggg cca gag ggc tga tta | all 2'Ome bases | 712 |
| stacker | ggg cca gag ggc tga at | all 2'Ome bases | 713 |
| stacker | ggg cca gag ggc t | all 2'Ome bases | 714 |
| stacker | ggg cca gag gg | all 2'Ome bases | 715 |
| stacker | agg cag tca gag tga tc | all 2'Ome bases | 716 |
| arrestor | agg cag tca gag tga tct c | all 2'Ome bases | 717 |
| arrestor | cggagaagcagttggtgctcgcggcggNH2 | all 2'Ome bases | 718 |
| SRT | Fcaac(Cy3)gcttctccg | 3' Amine | 719 |
| FRET probe | | | |
| probe | ccg tca cgc ctc tct gac tgc ct NH2 | 3' Amine | 720 |
| invader | tig tca ctc ggg gtt cga gaa gat gaa | | 721 |
| stacker | ggg cca gag ggc tga tta g | all 2'Ome bases | 722 |
| stacker | agg cag tca gag agg cg | all 2'Ome bases | 723 |
| arrestor | cggagaagcagttggtgctcgcggcggNH2 | 3'base 2'Ome, 3'Amine | 724 |
| SRT | Fcaac(Cy3)gcttctccg | | 725 |
| FRET probe | | | |
| probe | ccg tca cgc ctc tct gac tgc ctg gNH2 | 3' Amine | 726 |
| invader | tig tca ctc ggg gtt cga gaa gat gaa | | 727 |
| arrestor | cca ggc agt cag aga ggc g | all 2'Ome bases | 728 |
| arrestor | cggagaagcagttggtgctcgcggcggNH2 | 3'base 2'Ome, 3'Amine | 729 |
| SRT | Fcaac(Cy3)gcttctccg | | 730 |
| FRET probe | | | |
| probe | ccg ccg aga tca ctc tga ctg cc NH2 | 3' Amine | 731 |
| invader | tig tca ctc ggg gtt cga gaa gat gaa | | 732 |
| stacker | tgg gcc aga ggc ctg att a | all 2'Ome bases | 733 |
| stacker | agg cag tca gag tga tc | all 2'Ome bases | 734 |
| arrestor | cggagaagcagttggtgctcgcggcggNH2 | 3' Amine | 735 |
| SRT | Fcaac(Cy3)gcttctccg | | 736 |
| FRET probe | | | |
| probe | ccg ccg aga tca ctg atc tga ctg NH2 | 3' Amine | 737 |
| invader | ctt gtc act cgg ggt tgc aga aga c | | 738 |



739
740
741
742

all 2'Ome bases
all 2'Ome bases
3' Amine

743
744
745
746
747
748
749
750
751
752
753

3' Amine
3' Amine
3' Amine
3' Amine

all 2'Ome bases
all 2'Ome bases
all 2'Ome bases
all 2'Ome bases
3' 3bases 2'Ome

754
755
756
757
758

3' Amine
all 2'Ome bases, 3' Amine
3' 2 last base 2'Ome, 3' Amine

cct ggg cca gag ggc tga tt
cag tca gat cag tga tc
cggaagaagcagtggtgatctcgcggnh2
Fcaac(Cy3)gcttctcog

stacker
arrestor
SRT
FRET probe

cog tca cgc ctc tct gac tgc ca NH2
cog tca cgc ctc tct gac tgc cg NH2
cog tca cgc ctc tct gac ggc ct NH2
cog tca cgc ctc tct gac agc ct NH2
ttg tca ctc cgc ggt gta gaa gat gaa
ggg cca gag gg
agg cag tca gag agg cg
agg cag tca gag agg cg
agg cag tca gag agg cg
ccaggaagcaagtgaggcggtgacggg
Fcaac(Z21)gcttctcog

probe
probe
probe
probe
invader
stacker
arrestor
arrestor
arrestor
SRT
FRET probe

cog cog aga tca ctc tga tgc ctg gg NH2
ctt gtc act cgg ggt tog aga aga tga a
ccc agg cag tca gag tga tcNH2
cggaggaagcagtggtgatctcgcggnh2
Fcaac(Cy3)gcttctcog

probe
invader
arrestor
SRT
FRET probe

cog tca cgc ctc cat ctg ttg agg g NH2
cag gtc ctg gaa gga gca ctt a
cca tca gct tct ttg ttc ttg tca tc
gcc cta aac aga tgg agg cg
cggaagaagcagtggtgatctcgcggnh2
Fcaac(Cy3)gcttctcog

hIL-1β
probe
invader
stacker
arrestor
SRT
FRET probe

759
760
761
762
763
764

3' Amine
all 2'Ome bases
all 2'Ome bases
3'base 2'Ome, 3' Amine

cog tca cgc ctc cat ctg ttg agg gc NH2
cag gtc ctg gaa gga gca ctt a
cat cag ctt ctt tct tct tct cat cc
gcc cta aac aga tgg agg cg
cggaagaagcagtggtgatctcgcggnh2
Fcaac(Cy3)gcttctcog

probe
invader
stacker
arrestor
SRT
FRET probe

765
766
767
768
769
770

3' Amine
all 2'Ome bases
all 2'Ome bases
3'base 2'Ome, 3' Amine

cog tca cgc ctc cat ctg ttg agg NH2

probe

771



| | | | |
|------------|-------------------------------------|-------------------------------|-----|
| invader | cag gtc ctg gaa gga gca ctt a | all 2'Ome bases | 772 |
| stacker | gcc atc agc ttc ttt gtt ctt gtc atc | 3'base 2'Ome, 3'Amine | 773 |
| SRT | cggagaagcagttggaggcgtgacggtNH2 | | 774 |
| FRET probe | Fcaac(Cy3)gcttctctcog | | 775 |
| probe | cog tca cgc ctc cca tca gct tcNH2 | 3' Amine | 776 |
| invader | gag cac ttc atc tgt tta ggg a | | 777 |
| stacker | ttt gtt ctt gtc atc ctc att gcc ac | all 2'Ome bases | 778 |
| arrestor | gaa gct gat ggg agg cg | all 2'Ome bases | 779 |
| SRT | cggagaagcagttggaggcgtgacggtNH2 | 3'base 2'Ome, 3'Amine | 780 |
| FRET probe | Fcaac(Cy3)gcttctctcog | | 781 |
| probe | cgcgagatcactcctctgttttagggcNH2 | 3' Amine | 782 |
| probe | cgcgagatcactcctctgttttagggcNH2 | 3' Amine | 783 |
| invader | caggtcciggaaggagcacia | | 784 |
| arrestor | ggccttaacagatgagtgatcNH2 | all 2'Ome bases, 3'Amine | 785 |
| SRT | cggagaagcagttggaggcgtgacggtNH2 | 3' 2 last base 2'Ome, 3'Amine | 786 |
| FRET probe | Fcaac(Cy3)gcttctctcog | | 787 |

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|------------|-------------------------------------|-----------------------|-----|
| hcFOS | | | |
| probe | cog tca cgc ctc cag cag gtt ggc NH2 | 3' Amine | 788 |
| invader | gct tga ccc agg gag gg | | 789 |
| arrestor | gcc aag gta ctg gag gca | all 2'Ome bases | 790 |
| SRT | cggagaagcagttggaggcgtgacggtNH2 | 3'base 2'Ome, 3'Amine | 791 |
| FRET probe | Fcaac(Cy3)gcttctctcog | | 792 |
| probe | cog tca cgc ctc cag cag gtt gg NH2 | 3' Amine | 793 |
| invader | gct tga ccc agg gag gg | | 794 |
| stacker | caa tct cgg tct gca aag cag ac | all 2'Ome bases | 795 |
| arrestor | gcc aag gta ctg gag gca | all 2'Ome bases | 796 |
| SRT | cggagaagcagttggaggcgtgacggtNH2 | 3'base 2'Ome, 3'Amine | 797 |
| FRET probe | Fcaac(Cy3)gcttctctcog | | 798 |
| probe | cog tca cgc ctc tca gca ggt tgg NH2 | 3' Amine | 799 |
| invader | act cta gtt ttt cct tct cct a | | 800 |
| stacker | caa tct cgg tct gca aag cag ac | all 2'Ome bases | 801 |
| arrestor | cca acc tgc tga gag gca | all 2'Ome bases | 802 |
| SRT | cggagaagcagttggaggcgtgacggtNH2 | 3'base 2'Ome, 3'Amine | 803 |
| FRET probe | Fcaac(Cy3)gcttctctcog | | 804 |



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|------------|--|---------------------------------|-----|
| hIL-6 | ccg ccg aga tca ctc tcc tca ttg aat cct NH2 | 3' Amine | 805 |
| probe | ccg ccg aga tca ctc tcc tca ttg aat ccNH2 | 3' Amine | 806 |
| invader | cca aaa gtc cag tga tga ttt tca cca ggc aag a | | 807 |
| arrestor | agg att caa tga gga aga gtc atc tNH2 | all 2'Ome bases, 3' Amine | 808 |
| SRT | cgaggagcagcttggtgatctcgccgNH2 | 3' 2 last base 2' Ome, 3' Amine | 809 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 810 |
| probe | ccg tca cgc ctc ctc att gaaNH2 | 3' Amine | 811 |
| invader | cca gtg atg att ttc acc agg caa gta | | 812 |
| stacker | tcc aga ttg gaa gca tcc atc t | all 2'Ome bases | 813 |
| arrestor | ttc aat gag gag gag gc | all 2'Ome bases | 814 |
| SRT | cggaagaagcagcttgaggcggtgaacggtNH2 | 3' base 2'Ome, 3' Amine | 815 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 816 |
| probe | ccg tca cgc ctc ctc att gaaNH2 | 3' Amine | 817 |
| invader | cca gtg atg att ttc acc agg caa gta | | 818 |
| stacker | atc cag att gga agc atc cat ct | all 2'Ome bases | 819 |
| arrestor | ttc aat gag gag gag gc | all 2'Ome bases | 820 |
| SRT | cggaagaagcagcttgaggcggtgaacggtNH2 | 3' base 2'Ome, 3' Amine | 821 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 822 |
| probe | ccg tca cgc ctc ctc att gaa tNH2 | 3' Amine | 823 |
| probe | ccg tca cgc ctc ctc att gaa taNH2 | 3' Amine | 824 |
| probe | ccg tca cgc ctc ctc att gaa ttNH2 | 3' Amine | 825 |
| invader | cca aaa gtc cag tga tga ttt tca cca ggc aag ta | | 826 |
| stacker | cagattggaagcattccatct | all 2'Ome bases | 827 |
| arrestor | gattcaatgaggagaggc | all 2'Ome bases | 828 |
| SRT | ccaggagcaagtgaggcggtgacggu | 3' 3 bases 2'Ome | 829 |
| FRET probe | Fcaac(Z21)gcttctg9g | | 830 |
| hMCP-1 | ccg tca cgc ctc ctt cgg agt ttg gttNH2 | 3' Amine | 831 |
| probe | ccg tca cgc ctc ctt cgg agt ttg gtt NH2 | 3' Amine | 832 |
| invader | ggg ttg tgg agt gag tgt tca agt a | | 833 |
| arrestor | aac cca aac tcc gaa ggc ggc gtc gNH2 | all 2'Ome bases | 834 |
| SRT | cggaagaagcagcttgaggcggtgaacggtNH2 | 3' base 2'Ome, 3' Amine | 835 |

44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60



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|---------------------|-----|------------------------------|
| Fcaac(Cy3)gcttctccg | 836 | |
| probe | 837 | 3' Amine |
| probe | 838 | 3' Amine |
| Invader | 839 | |
| arrestor | 840 | all 2'Ome bases |
| SRT | 841 | 3'2 bases 2'Ome, 3' Amine |
| FRET probe | 842 | |
| probe | 843 | |
| probe | 844 | |
| Invader | 845 | |
| arrestor | 846 | all 2'Ome bases |
| SRT | 847 | 3' last base 2'Ome, 3' Amine |
| SRT | 848 | Amino dA modification |
| SRT | 849 | Amino dA modification |
| SRT | 850 | Amino dA modification |
| SRT | 851 | Amino dA modification |
| SRT | 852 | Amino dA modification |
| SRT | 853 | Amino dA modification |
| FRET probe | 854 | |
| probe | 855 | |
| Invader | 856 | 3' Amine |
| arrestor | 857 | all 2'Ome bases, 3' Amine |
| SRT | 858 | 3'2 bases 2'Ome, 3' Amine |
| FRET probe | 859 | |
| probe | 860 | |
| Invader | 861 | 3' Amine |
| arrestor | 862 | all 2'Ome bases |
| SRT | 863 | 3'3 bases 2'Ome |
| FRET probe | 864 | |
| probe | 865 | |
| Invader | 866 | 3' Amine |
| arrestor | 867 | all 2'Ome bases |
| SRT | 868 | 3' Amine |
| FRET probe | 869 | |

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|------------|--|-----|---------------------------------|-----|
| probe | aac gag gcg cac ctt cgg agt ttg gg NH2 | 870 | 3' Amine | 870 |
| invader | ggg ttg tgg agt gag tgt tca agt a | 871 | | |
| arrestor | ccc aaa ctc cga agg tgc g | 872 | all 2'Ome bases | |
| SRT | cggagaagcagttggtgcgcctgttaaNH2 | 873 | 3' last 5 bases 2'Ome, 3' Amine | |
| FRET probe | Fcaac(Cy3)gcttctccg | 874 | | |
| probe | cgc tca cgc ctc ctt cgg agt ttg g NH2 | 875 | 3' Amine | |
| invader | ggg ttg tgg agt gag tgt tca agt a | 876 | | |
| stacker | gtt tgc ttg tcc agg tgg | 877 | all 2'Ome bases | |
| arrestor | cca aac tcc gaa gga ggc g | 878 | all 2'Ome bases | |
| SRT | cggagaagcagttggtgcgcctgttaaNH2 | 879 | 3'base 2'Ome, 3'Amine | |
| FRET probe | Fcaac(Cy3)gcttctccg | 880 | | |
| probe | cgc tca cgc ctc ctt cgg agt ttg NH2 | 881 | 3' Amine | |
| invader | ggg ttg tgg agt gag tgt tca agt a | 882 | | |
| stacker | gtt ttg ctt gtc cag gtg g | 883 | all 2'Ome bases | |
| arrestor | cca aac tcc gaa gga ggc g | 884 | all 2'Ome bases | |
| SRT | cggagaagcagttggtgcgcctgttaaNH2 | 885 | 3'base 2'Ome, 3'Amine | |
| FRET probe | Fcaac(Cy3)gcttctccg | 886 | | |
| probe | cgc tca cgc ctc ctt cgg agt ttNH2 | 887 | 3' Amine | |
| invader | ggg ttg tgg agt gag tgt tca agt a | 888 | | |
| stacker | ggg ttg gct tgt cca ggt g | 889 | all 2'Ome bases | |
| arrestor | cca aac tcc gaa gga ggc g | 890 | all 2'Ome bases | |
| SRT | cggagaagcagttggtgcgcctgttaaNH2 | 891 | 3'base 2'Ome, 3'Amine | |
| FRET probe | Fcaac(Cy3)gcttctccg | 892 | | |
| probe | cgtcacgcctccgagttggtgNH2 | 893 | 3' Amine | |
| invader | gtt gtg gag tga gtg ttc aag tat ta | 894 | | |
| stacker | ttt gct tgt cca ggt ggt cca g | 895 | all 2'Ome bases | |
| arrestor | ccc aaa ctc cgg agg cg | 896 | all 2'Ome bases | |
| SRT | cggagaagcagttggtgcgcctgttaaNH2 | 897 | 3'base 2'Ome, 3'Amine | |
| FRET probe | Fcaac(Cy3)gcttctccg | 898 | | |
| probe | cgc cga gat cac egg agt ttg ggNH2 | 899 | 3' Amine | |
| invader | gtt gtg gag tga gtg ttc aag tat ta | 900 | | |
| stacker | ttt gct tgt cca ggt ggt cca g | 901 | all 2'Ome bases | |
| arrestor | cta gtg gcc tca aac cc | 902 | all 2'Ome bases | |
| SRT | cggagaagcagttggtgcgcctgttaaNH2 | 903 | 3' Amine | |
| FRET probe | Fcaac(Cy3)gcttctccg | 904 | | |

899 900 901 902 903 904



905
906
907
908
909
910

hUblquitin

probe cgc cga gat cac ctt tac att ttc tat cgt
probe cgc cga gat cac ctt tac att ttc tat cgt NH2
invader 5' -cct tcc tta tcc tgg atc ttg gca -3'
arrestor acc ata gaa aat gta aag gta atc
SRT 5'-cgc agt gag aat gag gta atc tgc gcggt-3'
FRET probe 5'-Red-cac-ZZ1-ttc tca gta cg-3'

3' Amine

all 2'Ome bases
3' last 3 bases 2'Ome

911
912
913
914
915
916

hIL-2
probe gtctctttgtctccgacgtgccNH2
invader cca gca gta aat gct cca gtt gta ga
stacker tag aac ttg aag tag gta c
arrestor caa aga aaa cac agg agg c
SRT ccaggagcaagtgaggcggtgacggu
FRET probe Fcac(ZZ1)tgctctgttg

3' Amine

all 2'Ome bases
all 2'Ome bases
3' 3bases 2'Ome

917
918
919
920
921
922

probe aac gag gcg cac ctg ttt ttt ctt ttg NH2
invader cca gca gta aat gct cca gtt gta ga
stacker tag aac ttg aag tag gta c
arrestor caa aga aaa cac agg tgc g
SRT ccaggagcaagtgaggcggtgacggttt
FRET probe Fcac(ZZ1)tgctctgttg

3' Amine

all 2'Ome bases
all 2'Ome bases
3' last 3 bases 2'Ome

923
924
925
926
927
928

probe ccg tca cgc ctc ctc cag ttg tag NH2
invader aaa atc atc ttt aaa tcc agc agt aaa tga
stacker ctg ttt ttt ctt ttt aga ac
arrestor cta caa ctg gag gag gc
SRT ccaggagcaagtgaggcggtgacggu
FRET probe Fcac(ZZ1)tgctctgttg

3' Amine

5' 6 bases 2'Ome
all 2'Ome bases
all 2'Ome bases
3' 3bases 2'Ome

929
930
931
932
933
934

probe aac gag gcg cac ctc cag ttg tag NH2
invader aaa atc atc ttt aaa tcc agc agt aaa tga
stacker ctg ttt ttt ctt ttt aga ac
arrestor cta caa ctg gag gta cg
SRT ccaggagcaagtgaggcggtgacggttt
FRET probe Fcac(ZZ1)tgctctgttg

3' Amine

5' 6 bases 2'Ome
all 2'Ome bases
all 2'Ome bases
3' last 3 bases 2'Ome





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|------------|--|---------------------------------|-----|
| stacker | gaa ctt gaa gta ggt gca ctg tt | 5' 3bases 2'Ome | 970 |
| stacker | gaa ctt gaa gta ggt gca ctg tt | 5' 6bases 2'Ome | 971 |
| arrestor | tac aaa gaa aac aca ggt gat ct | All 2' Ome | 972 |
| SRT | cggaggaagcagtggtggtcgcgggNH2 | 3' 2 last base 2'Ome, 3' Amine | 973 |
| FRET probe | Fcaac(Cy3)gcttctctcg | | 974 |
| probe | aac gag gcg cac cct tct tgg gca tgnH2 | 3' Amine | 975 |
| invader | ttc tag aca ctg aag atg tt cag ttc tgt gga | | 976 |
| arrestor | cat gcc caa gaa ggg tgc gNH2 | all 2'Ome bases | 977 |
| SRT | cggaggaagcagtggtggtcgcctgttaaNH2 | 3' last 5 bases 2'Ome, 3' Amine | 978 |
| FRET probe | Fcaac(Cy3)gcttctctcg | | 979 |
| probe | aac gag gcg cac taa ttc cat tca aaa tca tct | | 980 |
| invader | cat cct ggt gag tt ggg att ctt gta att tat a | | 981 |
| stacker | gta aat cca gca gta aat gct cca gNH2 | all 2'Ome bases, 3' Amine | 982 |
| arrestor | aga tga tt tga atg gaa tta tga gt NH2 | all 2'Ome bases, 3' Amine | 983 |
| SRT | cggaggaagcagtggtggtcgcctgttaaNH2 | 3' last 5 bases 2'Ome, 3' Amine | 984 |
| FRET probe | Fcaac(Cy3)gcttctctcg | | 985 |

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|------------|---|---------------------------------|------|
| hil-4 | cct gtc tgc ctg oca gtt gtg ttc ttg gag NH2 | 3' Amine | 986 |
| probe | ccc tgc aga agg ttt cct tct a | | 987 |
| invader | ccc tgc aga tgg ttt cct tct a | | 988 |
| arrestor | ctc caa gaa cac aac tgg cag cNH2 | all 2'Ome bases, 3' Amine | 989 |
| arrestor | ctc caa gaa cac aac tgg cag cga NH2 | all 2'Ome bases, 3' Amine | 990 |
| arrestor | ctc caa gaa cac aac tgg cag cga gNH2 | all 2'Ome bases, 3' Amine | 991 |
| SRT | cggaggaagcagtggtggtcgcctgttaaNH2 | 3' last base 2'Ome, 3' Amine | 992 |
| FRET probe | Fcaac(Cy3)gcttctctcg | | 993 |
| probe | aac gag gcg cac ctt gga ggc agc aaa NH2 | 3' Amine | 994 |
| probe | aac gag gcg cac ctt gga ggc agc aaNH2 | 3' Amine | 995 |
| invader | aag gtt tcc ttc tca gtt gtg tta | | 996 |
| arrestor | ctt tgc tgc ctc caa ggt gcg NH2 | all 2'Ome bases, 3' Amine | 997 |
| SRT | cggaggaagcagtggtggtcgcctgttaaNH2 | 3' last 5 bases 2'Ome, 3' Amine | 998 |
| FRET probe | Fcaac(Cy3)gcttctctcg | | 999 |
| probe | cag tca cgt ctc tgg agg cag caa aga tg NH2 | 3' Amine | 1000 |
| invader | aag gtt tcc ttc tca gtt gtg ttc ta | | 1001 |
| arrestor | cat ctt tgc tgc ctc cag aga cg NH2 | all 2'Ome bases, 3' Amine | 1002 |



1003
1004

3' Amine

gctactgagatgaaggagagcgactgtatNH2
Fcttc(Cy3)tcctagtc

SRT
FRET probe

1005
1006
1007
1008
1009

3' Amine

aac gag gcg cac ctt gga ggc agc aaa g NH2
aag gtt tcc ttc tca gtt glg tta
ctt tgc tgc ctc caa ggt gcg NH2
cggaggaagcagttggtgcgcctcgttaa
Fcaac(Cy3)gcttctctcg

probe
invader
arrestor
SRT
FRET probe

1010
1011
1012
1013
1014

3' Amine

cgc cga gat cac ccc ttt agt ttt aca aca gtNH2
gaa ttg gca ctc aaa tgt gtt gtc aga ga
act gtt gta aaa cta aag ggg gtc at NH2
cggaggaagcgttggtgctcgcgcgNH2
Fcaac(Cy3)gcttctctcg

mill-2
probe
invader
arrestor
SRT
FRET probe

1015
1016
1017
1018
1019
1020
1021
1022

3' Amine

tgc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2
gaa ttg gca ctc aaa tgt gtt gtc aga ga
act gtt gta aaa cta aag ggg gtc NH2
act gtt gta aaa cta aag ggg gtc at NH2
act gtt gta aaa cta aag ggg gtc at ctcgNH2
cggaggaagcgttggtgctcgcgcgNH2
Fcaac(Cy3)gcttctctcg

probe
invader
arrestor
arrestor
arrestor
SRT
FRET probe

1023
1024
1025
1026
1027
1028

3' Amine

gc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2
c cgc cga gat cac ccc ttt agt ttt aca aca gtNH2
gaa ttg gca ctc aaa tgt gtt gtc aga ga
act gtt gta aaa cta aag ggg gtc at NH2
cggaggaagcgttggtgctcgcgcgNH2
Fcaac(Cy3)gcttctctcg

probe
probe
invader
arrestor
SRT
FRET probe

1029
1030
1031
1032
1033

3' Amine

aac gag gcg cac ccc ttt agt ttt aca aca gt NH2
gaa ttg gca ctc aaa tgt gtt gtc aga ga
agtaactgtttgtaaaactaaaggggtgcg
cggaggaagcagttggtgcgcctcgttaa
Fcaac(Cy3)gcttctctcg

probe
invader
arrestor
SRT
FRET probe

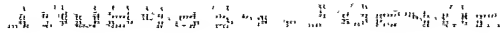
1034

3' Amine

aac gag gcg cac ccc ttt agt ttt aca aca gt NH2

probe

| | | |
|------------|---|------|
| invader | gaa ttg gca ctc aaa tgt gtt gtc aga ga | 1035 |
| arrestor | agt aac tgt tgt aaa act aaa ggg gtc cg. NH2 | 1036 |
| SRT | cggaggaagcagttggtgctgcctcgttaa | 1037 |
| FRET probe | Fcaac(Cy3)gcttcctcg | 1038 |
| probe | ccgtcacgcctcccttagttttacaacNH2 | 1039 |
| invader | gaa ttg gca ctc aaa tgt gtt gtc aga ga | 1040 |
| stacker | agt tac tct gat att gct gat gaa att ctc ag | 1041 |
| arrestor | gtgtataaactaaagggaggcg | 1042 |
| SRT | cggagaagcagttggagggtgacggtNH2 | 1043 |
| FRET probe | Fcaac(Cy3)gcttcctcg | 1044 |
| probe | cgcgagatcaccccttagttttacaacNH2 | 1045 |
| invader | gaa ttg gca ctc aaa tgt gtt gtc aga ga | 1046 |
| stacker | agt tac tct gat att gct gat gaa att ctc ag | 1047 |
| arrestor | gtgtataaactaaaggggtgalc | 1048 |
| SRT | cggagaagcagttgggagctcggcgNH2 | 1049 |
| FRET probe | Fcaac(Cy3)gcttcctcg | 1050 |
| probe | ccgtcacgcctcccttagttttacaacNH2 | 1051 |
| invader | gaa ttg gca ctc aaa tgt gtt gtc aga ga | 1052 |
| stacker | cagttactctgatatgtcgtgatgaaattctca | 1053 |
| arrestor | gtgtataaactaaagggaggcg | 1054 |
| SRT | cggagaagcagttggaggcggtgacggtNH2 | 1055 |
| FRET probe | Fcaac(Cy3)gcttcctcg | 1056 |
| probe | ccgtcacgcctcccttagttttacaacNH2 | 1057 |
| invader | gaa ttg gca ctc aaa tgt gtt gtc aga ga | 1058 |
| stacker | cagttactctgatatgtcgtgatgaaattctca | 1059 |
| arrestor | gtgtataaactaaagggaggcg | 1060 |
| SRT | ccgagaagcagttggaggcggtgacggtNH2 | 1061 |
| FRET probe | Fcaac(Cy3)gcttcgtgg | 1062 |
| mIL-10 | ccg tca cgc ctc ccg tta gct aag at NH2 | 1063 |
| probe | cga ggt ttt cca agg agt tgt tta | 1064 |
| invader | ccc tgg atc aga ttt aga gag c | 1065 |
| stacker | atc tta gct aac ggg agg cgg | 1066 |
| arrestor | cggagaagcagttggaggcggtgacggtNH2 | 1067 |
| SRT | | |

1097



1098
1099
1100
1101

all 2'Ome bases.3' Amine
all 2'Ome bases.3' Amine

invader
arrestor
SRT
FRET probe

gct ctg cag gat ttt cat gtc acc ata
gag gaa ctg gca aaa ggg tgc gNH2
gctactgagatgaaggagacgtgactgtgNH2
Fcttc(Cy3)tcctcagtagc

1102
1103
1104
1105
1106
1107
1108

3' Amine
all 2'Ome bases
all 2'Ome bases
3' last 5 bases 2'Ome
3' last 5 bases 2'Ome

probe
invader
stacker
arrestor
SRT
SRT
FRET probe

aac gag ggc cac cct ttg gcc agt NH2
gct ctg cag gat ttt cat gtc acc ata
tcc tcc aga tat cca aga aga gac tc
act ggc aaa agg cgg gc
cgg agg aaag cag ttg gtc ctc gcu aa NH2
cgg aag aaag cag ttg gtc ctc gcu aa NH2
Fcaac(Cy3)gcttcctccg

1109
1110
1111
1112
1113
1114

3' Amine
all 2'Ome bases
all 2'Ome bases

probe
invader
stacker
arrestor
SRT
FRET probe

gcc gca cgc cgt ttg cca gt NH2
gct ctg cag gat ttt cat gtc acc ata
tcc tcc aga tat cca aga aga gac tc
act ggc aaa agg cgg gc
cgg agg aag cag ttg cgg cgt ggc gca NH2
Fcaac(Cy3)gcttcctccg

1115
1116
1117
1118
1119
1120

3' Amine
all 2'Ome bases
all 2'Ome bases
3' last 5 bases 2'Ome

probe
invader
stacker
arrestor
SRT
FRET probe

aac gag ggc cac cct ttg gcc agt tc NH2
gct ctg cag gat ttt cat gtc acc ata
ctc cag ata tcc aag aag aga ctc
gaa ctg gca aaa ggg tgc g
cggaggagcagttggtgcctcgttaaNH2
Fcaac(Cy3)gcttcctccg

1121
1122
1123
1124
1125
1126
1127

3' Amine
3' Amine
all 2'Ome bases.3' Amine
all 2'Ome bases.3' Amine
3'2 bases 2'Ome, 3'Amine

hIL-8
probe
probe
invader
arrestor
arrestor
SRT
FRET probe

cgc tca cgc ctc ctt ggc aaa act gca ccNH2
cgc tca cgc ctc ctt ggc aaa act gca cca NH2
ctt tat gca ctg aca tct aag ttc ttg agc act ca
tgg tgc agt ttt gcc aag gag ggc gNH2
tgg tgc agt ttt gcc aag gag ggc tg NH2
cggagaagcagttgagggcgtgacggcNH2
Fcaac(Cy3)gcttcctccg

1128
1129
1130

3' Amine
3' Amine

probe
probe
invader

cgc tca cgc ctc cat ctt cac tga ttc ttg gNH2
cgc tca cgc ctc cat ctt cac tga ttc ttg gNH2
agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga



| | | | |
|------------|--|---------------------------|------|
| stacker | gat acc aca gag aat gaa tttt | all 2'Ome bases | 1131 |
| arrestor | tcc aag aat cag tga aga tgg agg cg NH2 | all 2'Ome bases, 3' Amine | 1132 |
| arrestor | tcc aag aat cag tga aga tgg agg cgt gNH2 | all 2'Ome bases, 3' Amine | 1133 |
| arrestor | g aat cag tga aga tgg agg cg | all 2'Ome bases | 1134 |
| SRT | cggagaagcagttggaggcgtgacggcNH2 | 3'2 bases 2'Ome, 3' Amine | 1135 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 1136 |
| probe | cgc tca cgc cct tgg ctc aat tt gct NH2 | 3' Amine | 1137 |
| invader | cca ttc aat tcc tga aat taa agt tgg gat att ctc ttg gca | 5' 10 bases are 2'Ome | 1138 |
| invader | cc tga aat taa agt tgg gat att ctc ttg gca | | 1139 |
| invader | cc tga aat taa agt tgg gat att ctc ttg gca | | 1140 |
| arrestor | agg aaa att gag cca agg gag gcg NH2 | all 2'Ome bases, 3' Amine | 1141 |
| arrestor | agg aaa att gag cca agg gag gcg tgnH2 | all 2'Ome bases, 3' Amine | 1142 |
| SRT | cggagaagcagttggaggcgtgacggcNH2 | 3'2 bases 2'Ome, 3' Amine | 1143 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 1144 |
| probe | cgc tca cgc ctc cat ctt cac tga ttc ttg NH2 | 3' Amine | 1145 |
| invader | ttc tag caa acc cat tca att cct gaa att aaa gtt cgg ata ttc ta | 5' 10 bases 2'Ome | 1146 |
| invader | cc cat tca att cct gaa att aaa gtt cgg ata ttc ta | | 1147 |
| invader | cc cat tca att cct gaa att aaa gtt cgg ata ttc ta | | 1148 |
| arrestor | cca agg gcc aag gag gcg tNH2 | | 1149 |
| SRT | cggagaagcagttggaggcgtgacggcNH2 | 3'2 bases 2'Ome, 3' Amine | 1150 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 1151 |
| probe | cgc tca cgc ctc cat ctt cac tga ttc ttc NH2 | 3' Amine | 1152 |
| invader | agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga | | 1153 |
| stacker | ttg gat acc aca gag aat gaa tt | all 2'Ome bases | 1154 |
| SRT | cggagaagcagttggaggcgtgacggcNH2 | 3'base 2'Ome, 3' Amine | 1155 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 1156 |
| probe | cgc tca cgc ctc cat ctt cac tga tt NH2 | 3' Amine | 1157 |
| invader | agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga | | 1158 |
| stacker | ctt gga tac cac aga gaa tga att | | 1159 |
| SRT | cggagaagcagttggaggcgtgacggcNH2 | 3'base 2'Ome, 3' Amine | 1160 |
| FRET probe | Fcaac(Cy3)gcttctccg | | 1161 |
| probe | cgc tca cgc ctc cat ctt cac tga ttc ttg NH2 | 3' Amine | 1162 |
| invader | agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga | | 1163 |
| helper | ata-cca-cag-aga-atg-aat-ttt-ttt-atg | all 2'Ome bases | 1164 |
| arrestor | tcc aag aat cag tga aga tgg agg cgt gNH2 | all 2'Ome bases, 3' Amine | 1165 |

1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200



1166
1167

3'base 2'Ome, 3'Amine

cggaagaagcagttggaggcgtgacggtNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1168
1169

3' Amine

cggaagaagcagttggtgatctcggcgNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1170
1171

3'base 2'Ome, 3'Amine

cggaagaagcagttggaggcgtgacggtNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1172
1173

3' 3bases 2'Ome

ccagggaagcaagtgaggcggtgacggu
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1174
1175

3' 2 last base 2'Ome, 3' Amine

cggaagaagcagttggtgatctcggcgNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1176
1177

3'2 bases 2'Ome, 3'Amine

cggaagaagcagttggaggcgtgacggtNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1178
1179

3' last 3 bases 2'Ome

ccagggaagcaagtggtgctcgtctgtt
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1180
1181

3' last5 bases 2'Ome

cggaagaagcagttggtgctcgtctgttNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1182
1183

3' Last 2bases 2'Ome, 3' Amine

cggaagaagcagttggtgatctcggcgNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1184
1185

3' Amine

gctactgagatgaaggagacgtgactgtNH2
Fcttc(Cy3)gctcagtagc

SRT
FRET probe

1186
1187

3' 2 bases 2'Ome, 3'Amine

ccagggaagcagttggaggcgtgacggtNH2
Fcaac(Cy3)gcttctctcog

SRT
FRET probe

1188
1189

agg agc cac tcc att gga lga agc
atg tac aga atc ccc ggt tat tta tgc aga

h3A4 probe
h3A4 invader
Capture Sequence

Set 1



1213

h3A4 invader
SRT
FRET Oligo
cct cct tta tat toc caa gta taa cac tct aa

1214
1215
1216
1217

Set 9
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
SRT
FRET Oligo
aac gag gcg cac cac aga caa tga ga-NH2
tct cat tgt ctg tgg tgc gc-NH2
cct cct tta tat toc caa gta taa cac tct aa
gag ctc aat gca tgt aca gaa toc ccg

1218
1219
1220
1221

Set 1/Set 2
h3A4 probe
h3A4 probe
h3A4 invader
h3A4 arrestor
SRT
AACGAGGCGCACCTCTTATCAGAGCTC
AACGAGGCGCACCTCTTATCAGAGCTC-NH2
ttg tgg agg aaa tta ttg aga aat gtt gat ta
GAGCTCTGATAAGAGGIGCG-NH2

1222
1223
1224
1225
1226
1227

Set 1/ Set 2/ Set 3
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
h3A4 stacking oligo
h3A4 stacking oligo
SRT
FRET
cog tca cgc ctc gcc cca ca - NH2
tgt ggg gcg agg cg
cag cac agg ctg ttg acc atc ata aaa c
uuu-uuc-cau-acu-uuu-uau-gac-auu-c
ctt ttc cag act ttt tat gac att c
ctt ttc cag act ttt tat gac

1228
1229
1230
1231

Set 4/Set 5
h3A4 probe
h3A4 probe
h3A4 invader
h3A4 stacking oligo
SRT
FRET
cog tca cgc ctc gcc cca ca
cog tca cgc ctc gcc cca ca - HEX
cag cac agg ctg ttg acc atc ata aaa c
uuu-uuc-cau-acu-uuu-uau-gac-auu-c

1232

Set 6/ Set 7/ Set 8
h3A4 probe
cog tca cgc ctc gcc cca cc - NH2



1233
1234
1235
1236
1237

h3A4 probe
h3A4 probe
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
SRT
FRET

cog tca cgc ctc gcc cca cg - NH2
cog tca cgc ctc gcc cca ct - NH2
tgt ggg gcg agg cg
cag cac agg ctg ttg acc atc ata aaa c
cuu-uuc-cau-acu-uuu-uuu-uau-gac-auu-c

1238
1239
1240
1241

Set 1
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
SRT
FRET

cog tca cgc ctg atc ata aaa gcc c - NH2
ggg ctt tta tga tca ggc g
cag cac agg ctg ttg acc c
cac act ttt cca tac tta tta tg

1242
1243
1244
1245

Set 2
h3A4 probe
h3A4 arrestor
h3A4 invader
h3A4 stacking oligo
SRT
FRET

aac gag gcg cac cca ttg gat gaa g - NH2
ctt cat cca atg ggt gcg c
gta cag aat ccc cgg tta ttt atg cag ta
ccc atc ttc att tca gag

1246
1247

Set 1
h3A5 probe
h3A5 invader
Capture Sequence

gtg gcg tat cgt gtc taa ttt caa g
aat ggg ttt ttc tgg ttg aag aag tcc ttg a

1248
1249
1250
1251

Set 2/Set 3
h3A5 probe
h3A5 probe
h3A5 arrestor
h3A5 invader
SRT
FRET

AACGAGGCGCACCGTGCTAAATTTCAAG
AACGAGGCGCACCGTGCTAAATTTCAAGGG-Pi
CTTGAAATTAGACACGGTGCG-NH2
aat ggg ttt ttc tgg ttg aag aag tcc ttg a

1252
1253

Set 4
h3A5 probe
h3A5 arrestor

AACGAGGCGCACCGTGCTAAATTTCAAG
CTTGAAATTAGACACGGTGCG-NH2

1254
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1300



1254
1255

h3A5 invader
h3A5 stacking oligo
SRT
FRET

1256
1257
1258
1259

Set 5
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1260
1261
1262
1263

Set 6
h3A5 probe
h3A5 arrestor
h3A5 invader
SRT
FRET probe

1264
1265
1266
1267
1268
1269

Set 7/Set 8
h3A5 probe
h3A5 probe
h3A5 arrestor
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1270
1271
1272
1273

Set 9
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

1274

Set 10
h3A5 probe

1275
1276
1277
1278
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1287
1288
1289
1290
1291
1292
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1294
1295
1296
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1300

1275
1276
1277

h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

tga aat tag aca cgg tgc gc
ggg ttt tct ggt tga aga agt cct tga
agg gga tct gtg ttt ct

1278
1279

Set 1
h3A5 probe
h3A5 invader
Capture Sequence

tgg cgt atc tga ccc ttt ggg aat
gaa gag cat aag ttg gaa tca cca cca ta

1280
1281

Set 1
h3A5 probe
h3A5 invader
Capture Sequence

ata cgg ttg gtc ctc tca agt cta
ccc cat tga ttt caa cat ctt tct tgc aac

1282
1283
1284
1285

Set 2/Set 3
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

aac gag ggc cac ggc tgt cta att tc - NH2
gaa att aga cac ggc tgc gc
ggg ttt tct ggt tga aga agt cct tc
ccg ggg atc tgt gtt tc

1286
1287
1288
1289

h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

cgg tca cgc ctc ggc tgt cta att tc -NH2
gaa att aga cac ggc agg cg
ggg ttt tct ggt tga aga agt cct tc
ccg ggg atc tgt gtt tc

1290
1291
1292
1293

Set 1
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET
Set 2

aac gag ggc cag ttc ata cgt tcc -NH2
gga acg tat gaa ctg cgc
cca gca cag gga gtt gac ca
cca cat ttt tcc ata ctt t



1294
1295
1296
1297

h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

ccg tca cgc ctc ttc ata cgt tcc -NH2
gga acg tat gaa cag gcg
cca gca cag gga gtt gac ca
cca cat ttt tcc ata ctt t

1298
1299
1300
1301
1302
1303
1304

Set 1-Set 4
h3A5 probe
h3A5 probe
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

aac gag gcg cac agt tga cct tca
aac gag gcg cac agt tga cct tca
aac gag gcg cac agt tga cct tca - HEX
tga agg tca act gtc cgc
gtg atg gcc agc aca ggg c
tac gtt ccc cac att ttt c
tac gtt ccc cac att ttt c

1305
1306
1307
1308

Set 5
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

ccg tca cgc ctc agt tga cct tca
tga agg tca act gag gcg
gtg atg gcc agc aca ggg c
tac gtt ccc cac att ttt c

1309
1310
1311
1312

Set 6
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT
FRET

aac gag gcg cac tcc tct caa gt -NH2
act tga gag gag tgc gc
cca ttt att tca aca tct ttc ttg caa ga
cta ata gca act ggg aat aat c

1313
1314
1315
1316

Set 7
h3A5 probe
h3A5 arrestor
h3A5 invader
h3A5 stacking oligo
SRT

ccg tca cgc ctc tcc tct caa gt - NH2
act tga gag gag agg cg
cca ttt att tca aca tct ttc ttg caa ga
cta ata gca act ggg aat aat c



FRET

Set 8

h3A5 probe aac gag ggc cac agt tga cct tc - NH2
h3A5 arrestor tga agg tca act gtg cgc
h3A5 invader gtg atg gcc agc aca ggg c
h3A5 stacking oligo ata cgt tcc cca cat ttt tc

SRT

FRET

Set 1

h3A7 Probe tgg cgt atc tgg att aaa tct taa aag
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a
Capture Oligo

Set 2

h3A7 Primary Probe AACGAGGGCGCACTGGATTAAATCTTAAAAG
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a
h3A7 Arrestor CTTTAAAGATTTAATCCAGTGCG-NH2

SRT

FRET

Set 3

h3A7 Primary Probe AACGAGGGCGCACTGGATTAAATCTTAAAAG
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a
h3A7 Arrestor CTTTAAAGATTTAATCCAGTGCG-NH2
h3A7 Stacking Oligo ctt ctt ggt gtt ttc ca

SRT

FRET

Set 4

h3A7 Probe agg agc cac tca tcc ctt gac t
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta
Capture Oligo

Set 5/Set 6

h3A7 Primary Probe AACGAGGGCGCACCTCATCCCTTGACT
h3A7 Primary Probe AACGAGGGCGCACCTCATCCCTTGACT-NH2
h3A7 Arrestor AGTCAAGGGATGAGGTGCG-NH2
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta

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SRT
FRET

Set 7 - Set 10

h3A7 Primary Probe
h3A7 Arrestor
h3A7 Invader oligo
h3A7 Stacking Oligo
h3A7 Stacking Oligo
h3A7 Stacking Oligo
h3A7 Stacking Oligo
SRT
FRET

aac gag gcg cac ctc atc cct tga c-NH2
gtc aag gga tga ggt gcg c-NH2
ctt agg gaa atc agg ctc cac tta cgg ta
tca gcc tt aga aca atg ggt tt tct gtt ag3'
tca gcc tt aga aca atg ggt tt tct g
ctc agc ctt tag aac aat ggg tt ttc t
ctc agc ctt tag aac aat ggg tt ttc t

1336
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Set 11

h3A7 Primary Probe
h3A7 Primary Probe
h3A7 Arrestor
h3A7 Invader oligo
h3A7 Stacking Oligo
SRT
FRET

aac gag gcg cac ctc atc cct tga-NH2
aac gag gcg cac ctc atc cct tga c
tca agg gat gag gtc cgc-NH2
ctt agg gaa atc agg ctc cac tta cgg ta
ctc agc ctt tag aac aat ggg tt ttc tgt tag

1343
1344
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Set 1

h3A7 Probe
h3A7 Invader
Capture Sequence

ata cgg ttg gta aag taa ttg gag gt
gaa gcc cgt ctt cat ttc agg gtt cta tt c

1348
1349

Set 2

h3A7 Primary Probe
h3A7 Invader
h3A7 Arrestor
SRT
FRET

AACGAGGCGCACGTAAAGTAATTTGAGGT
gaa gcc cgt ctt cat ttc agg gtt cta tt c
ACCTCAAAATTAACITACGIGCG-NH2

1350
1351
1352

Set 3

h3A7 Primary Probe
h3A7 Invader
h3A7 Arrestor
h3A7 Stacking Oligo

AACGAGGCGCACGTAAAGTAATTTGAGGT
gaa gcc cgt ctt cat ttc agg gtt cta tt c
ACCTCAAAATTAACITACGIGCG-NH2
ctc tgg tgt tct ggg

1353
1354
1355
1356



SRT
FRET

Set 1
h3A7 probe ccc tca cgc ctc gtc ata aat acc cc - NH2
h3A7 arrestor **ggg gtc ttt atg acg agg cg**
h3A7 invader gcc agc ata ggc tgt tga cac
h3A7 stacking oligo **aga ctt ttc tat act ttt tat aac att c**
SRT
FRET

1357
1358
1359
1360

Set 2 - Set 4

h3A7 probe aac gag gcg cac gtc ata aat acc cc -NH2
h3A7 probe aac gag gcg cac gtc ata aat acc cc
h3A7 probe aac gag gcg cac gtc ata aat acc cc - HEX
h3A7 arrestor **ggg gta ttt atg acg tgc gc**
h3A7 invader gcc agc ata ggc tgt tga cac
h3A7 stacking oligo **aga ctt ttc tat act ttt tat aac att c**
SRT
FRET

1361
1362
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1366

Set 1

h3A7 probe ccc tca cgc ctc gat taa atc tta aaa gct t - NH2
h3A7 arrestor **aag ctt tta aga ttt aat cga ggc g**
h3A7 invader gac ttt tat tga gag aac gaa tgg atc taa tgc
h3A7 stacking oligo **ctt ggt gtt ttc cac aaa g**
SRT
FRET

1367
1368
1369
1370

Set 2

h3A7 probe aac gag gcg cac gat taa atc tta aaa gct t -NH2
h3A7 arrestor **aag ctt tta aga ttt aat cgt ggc c**
h3A7 invader gac ttt tat tga gag aac gaa tgg atc taa tgc
h3A7 stacking oligo **ctt ggt gtt ttc cac aaa g**
SRT
FRET

1371
1372
1373
1374

Set 1

h3A7 probe ccc tca cgc ctg tca tcc ctt g - NH2
h3A7 arrestor **caa ggc atg cac ggc g**

1375
1376



1377
1378

h3A7 invader gga aat cag gct cca ctt acg gtc a
h3A7 stacking oligo act cag cct tta gaa caa tg
SRT
FRET

1379
1380
1381
1382

Set 1
h3A7 probe ccg tca cgc ctc taa agt aat ttg agg tc -NH2
h3A7 arrestor gac ctc aaa tta ctt tag agg cg
h3A7 invader cgt ctt cat ttc agg gtt cta ttt ga
h3A7 stacking oligo tct ggt gtt ctg gg
SRT
FRET

1383
1384
1385
1386

Set 2
h3A7 probe aac gag gcg cac taa agt aat ttg agg tc -NH2
h3A7 arrestor gac ctc aaa gga ctt tag tgc gc
h3A7 invader cgt ctt cat ttc agg gtt cta ttt ga
h3A7 stacking oligo tct ggt gtt ctg gg
SRT
FRET

1387
1388

Set 1
r4A1 Probe tgg-cgt-atc-tag-gct-ttg-ctt-cc
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a
Capture Sequence

1389
1390
1391
1392

Set 2
r4A1 Primary Probe AACGAGGCGCACTAGGCTTTGCTTCC
r4A1 Arrestor GGAAAGCAAAGCCTAGTGCG-NH2
r4A1 Arrestor gga agc aaa gcc tag tgc gc-NH2
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a
FRET Probe 1

1393
1394
1395

Set 3
r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ccc-NH2
r4A1 Arrestor ggg aag caa agc cta gtc cgc-NH2
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a
SRT
FRET Probe 1



Set 4
r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt c-NH2
r4A1 Arrestor gaa gca aag cct agt gcg c
r4A1 Stackers ccc aga acc atc gag gaa agg c
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a
SRT
FRET Probe 1

1396
1397
1398
1399

Set 5
r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt-NH2
r4A1 Arrestor aag caa agc cta gtg cgc-NH2
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a
r4A1 Stackers ccc cag aac cat cga gga aag g
r4A1 Stackers ccc cag aac cat cga gga aag g
SRT
FRET Probe 1

1400
1401
1402
1403
1404

Set 6
r4A1 Primary Probe aac gag gcg cac tag gct ttg ct-NH2
r4A1 Primary Probe aac gag gcg cac tag gct ttg ct - HEX
r4A1 Probe aac gag gcg cac tag gct ttg ct
r4A1 Arrestor agc aaa gcc tag tgc gc-NH2
r4A1 Arrestor agc aaa gcc tag tgc gc
r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a
r4A1 Stackers tcc cca gaa cca tgc agg aaa gg
r4A1 Stackers tcc cca gaa cca tgc agg aaa gg
SRT
FRET Probe 1

1405
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1412

Set 1
r4A1 Probe ata cgg ttg gtc ttg acc tgc c
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac
Capture Sequence

1413
1414

Set 2
r4A1 Primary Probe AACGAGGCGCACGCTCTTGACCTGCC
r4A1 Arrestor GGCAGGTCAAGACGTCG-NH2
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac

1415
1416
1417



SRT
FRET Probe 1

Set 3
r4A1 Primary Probe AACGAGGCGCACGTCCTTGACCTGC-Pi
r4A1 Arrestor GGCAGGTCAAGACGTCGG-NH2
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac
SRT
FRET Probe 1

1418
1419
1420

Set 1
r4A1 Probe tgg cgt atc tta gat gga gla agg a
r4A1 Invader att cct cat aat tca aaa ggg act tag tag gt

1421
1422

Set 2
r4A1 Primary Probe AACGAGGCGCACTTAGATGGAGTAAGGA
r4A1 Arrestor ICCTTACICCAICTAAGTCGG-NH2
SRT
FRET Probe 1

1423
1424

Set 1
r4A1 Primary Probe aac gag gcg cac tgg ata ccc ttg gg-NH2
r4A1 Arrestor ccc aag ggt atc cag tgc gc-NH2
r4A1 Invader ggt gga gac cat aaa tgg aga gtg tga cta
SRT
FRET Probe 1

1425
1426
1427

Set 1
r4A2 Probe aac gag gcg cac agg tgt ctg gag laa aag-NH2
r4A2 Arrestor ctt tta ctc cag aca cct gtc cgc-NH2
r4A2 Invader gtc cac gca caa gct ggg ac
SRT
FRET Probe 1

1428
1429
1430

Set 1
r4A2 Probe aac gag gcg cac aga agg ccc ctt-NH2
r4A2 Arrestor aag ggg cct tct gtc cgc-NH2
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c
r4A2 stacking oligo gga aga acc cag aga cac cat cc
SRT

1431
1432
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1434



FRET Probe 1

Set 2

r4A2 Probe cgc tca cgc ctc aga agg ccc ctt g-NH2
r4A2 Arrestor aag ggg cct tct gag gcg g-NH2
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c
SRT

FRET Probe 1

Set 3

r4A2 Probe aac gag gcg cac aga agg ccc ctt g-NH2
r4A2 Arrestor caa ggg gcc ttc tgt gcg g-NH2
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c
SRT

FRET Probe 1

Set 4

r4A2 Probe aac gag gcg cac aga agg ccc ctt g-NH2
r4A2 Probe aac gag gcg cac aga agg ccc ctt
r4A2 Probe aac gag gcg cac aga agg ccc ctt - HEX
r4A2 Arrestor cca agg ggc ctt ctg tgc g-NH2
r 4A2 Arrestor aag ggg cct tct gta cgc
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c
SRT

FRET Probe 1

Set 1

r4A3 Probe aac gag gcg cac tga aca gag tcc gc-NH2
r4A3 Arrestor gcg gac tct gtc aag tgc g-NH2
r4A3 Invader gct tct ccc att tgt cta gca tta taa
SRT

FRET Probe 1

Set 2

r4A3 Probe aac gag gcg cac tga aca gag tcc gc-NH2
r4A3 Arrestor cgg act ctg tca agt gcg g-NH2
r4A3 Invader gct tct ccc att tgt cta gca tta taa
r4A3 stacking oligo cca tga ttt tga cat agg gtt tga gga tg
SRT

FRET Probe 1

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1453



Set 3
r4A3 Probe
r4A3 Probe
rCYP 4A3 Probe
r4A3 Arrestor
rCYP 4A3 Arrestor
r4A3 Invader
r4A3 stacking oligo
SRT
FRET Probe 1

aac gag gcg cac ttg aca gag tcc-NH2
aac gag gcg cac ttg aca gag tcc
aac gag gcg cac ttg aca gag tcc - HEX
gga ctc tgt caa gtg cgc-NH2
gga ctc tgt caa gtg cgc
gct tct ccc att tgt cta gca tta taa
gcc atg att ttg aca tag ggt ttg agg atg

1454
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1460

Set 1
r2B1 probe
r2B1 invader
Capture Sequence

cgg agc ctc tgc ggt cat caa g
tgg ata act gca tca gtg tat ggc att tta a

1461
1462

Set 2/ Set 3
r2B1 probe
r2B1 probe
r2B1 probe
r2B1 invader
Capture Sequence

gtg-gcg-tat-ctg-cgg-tca-tca-ag
gtg-gcg-tat-ctg-cgg-tca-tca-a
tgg ata act gca tca gtg tat ggc att tta a

1463
1464
1465

Set 4
r2B1 probe
r2B1 invader
Capture Sequence

tg-gcg-tat-ctg-cgg-tca-tca-a
tgg ata act gca tca gtg tat ggc att tta a

1466
1467

Set 5 - Set 7
r2B1 probe
r2B1 arrestor
r2B1 arrestor
r2B1 arrestor
r2B1 invader
SRT
FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-a
ttg-atg-acc-gca-ggt-gcg-cc-NH2
ttg-atg-acc-gca-ggt-gcg-cc-Pi
ttg-atg-acc-gca-ggt-gcg-cc-OH
tgg ata act gca tca gtg tat ggc att tta a

1468
1469
1470
1471
1472

Set 8
r2B1 probe

aac-gag-gcg-cac-ctg-cgg-tca-tca-a

1473

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1500



1474
1475
1476

ttg-atg-acc-gca-ggt-gcg-cc-Pi
tgg ata act gca tca gtg tat ggc att tta a
ggg ttg gta gcc tgt gtg agc cga t

r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET

1477
1478
1479

aac-gag-gcg-cac-ctg-cgg-tca-tca-a-NH2
ttg-atg-acc-gca-ggt-gcg-NH2
tgg ata act gca tca gtg tat ggc att tta a

Set 9
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

1480
1481
1482

ggc-aac-gag-gca-cac-ctg-cgg-tca-tca-ag-Pi
ttg-atg-acc-gca-ggt-gcg-cc-Pi
tgg ata act gca tca gtg tat ggc att tta a

Set 10
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

1483
1484
1485

aac-gag-ggg-cac-ctg-cgg-tca-tca-ag-NH2
ctt gat gac cgc agg tgc c-NH2
tgg ata act gca tca gtg tat ggc att tta a

Set 11
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

1486
1487
1488

aac-gag-gcg-cac-ctg-cgg-tca-tca-agg-NH2
cct tga tga ccg cag gtg cg-NH2
tgg ata act gca tca gtg tat ggc att tta a

Set 12
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET

1489
1490
1491

atg acg tga cag acc tgc ggt cat caa g-NH2
ctt gat gac cgc agg tct gt-NH2
tgg ata act gca tca gtg tat ggc att tta a

Set 13
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET



1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509

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1509

Set 14
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET
aac gag gcg cac ctg agg tca tca a-NH2
ttg atg acc tca cgt gcg-NH2
tgg ata act gca tca tgg tat ggc att tta a

Set 15
r2B1 probe
r2B1 arrestor
r2B1 invader
SRT
FRET
cag tca cgt ctg ctg cgg tca tca ag-NH2
ctt gat gac cgc agg aga cgc-NH2
tgg ata act gca tca tgg tat ggc att tta a

Set 16
r2B1 probe
r2B1 invader
r2B1 arrestor
SRT
FRET
cag tca cgt ctg act gcg gtc atc aag-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
ctt gat gac cgc agt gag acg-NH2

Set 17
r2B1 probe
r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET
cag tca cgt ctg act gcg gtc atc aa-NH2
ttg atg acc gca gta aga cgc-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
ggg ttg gta gcc tgt gta agc cga t

Set 18
r2B1 probe
r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET
cag tca cgt ctg act gcg gtc atc a-NH2
tga tga cgc cag tga gac g-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
agg gtt ggt agc ctg tgt gag ccg a

Set 19
r2B1 probe
cag tca cgt ctg act gcg gtc atc aag-NH2



1510
1511
1512

ctt gat gac cgc agt gag agc g-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
ggt tgg tag cct gtg tga gcc gat c

r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET

1513
1514
1515
1516

cag tca cgt ctc act gcg gtc atc a-NH2
atg acc gca gtg aga cg g-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
caa ggg ttg gta gcc tgt gtg agc c

Set 20
r2B1 probe
r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET

1517
1518
1519
1520

ccg tca cgc ctc act gcg gtc atc a-NH2
tga tga ccg cag tga gcc g-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
agg gtt ggt agc ctg tgt gag ccg a

Set 21
r2B1 probe
r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET

1521
1522
1523
1524

ccg tca cgc ctc act gcg gtc atc a-NH2
gat gac cgc agt gag ccg-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
aag ggt tgg tag ccg gtg tg

Set 22
r2B1 probe
r2B1 arrestor
r2B1 invader
r2B1 stacker

1525
1526
1527
1528
1529

ccg tca cgc ctc act gcg gtc atc a-NH2
ccg tca cgc ctc act gcg gtc at
atg acc gca gtg agc cg-NH2
gtg gat aac tgc atc agt gta tgg cat ttt c
caa ggg ttg gta gcc tgt gtg agc c

Set 23
r2B1 probe
r2B1 probe
r2B1 arrestor
r2B1 invader
r2B1 stacker
SRT
FRET

1530
1531

atg gtg tct ttg gtg act ctg tgt ggt aca
aac-gag-gcg-cac-tcc-aat-agg-gac-aag

Set 1
r2B1 invader
r2B1 probe



1532

ctt-gtc-cct-att-gga-gtg-cgc-c

r2B1 arrestor
SRT
FRET

1533
1534

gcg gcg tac agc cgg tgt gag c
cat ttt act gcg gtc atc aag ggt tgg tc

Set 1
r2B1 probe
r2B1 invader
Capture Sequence

1535
1536

tgg cgt atg agc cgg tgt gag c
cat ttt act gcg gtc atc aag ggt tgg tc

r2B1 probe
r2B1 invader
Capture Sequence

1537
1538
1539

gga tga ctg cat cag tgt atg gca ttt tgc
aac-gag-gcg-cac-gta-cga-tca-tca-agg
cct-tga-tga-tcg-tac-tac-gtg-cgc-c-NH2

Set 1
r2B2 invader
r2B2 probe
r2B2 arrestor
SRT
FRET

1540
1541
1542
1543

atg gtg tct ttg gtg act ctg tgt ggt aac
tgg cgt atg acc aat tgg ggc aa
gat ctg caa atc tct gaa tct cgt gga tg
tct tgg aga gca ggt acc ctg gga ac

Set 1
r2B2 invader
r2B2 probe
r2B2 stacker
r2B2 invader stacker

1544
1545
1546
1547

tgg cgt atg acc aat tgg ggc aag
atg gtg tct ttg gtg act ctg tgt ggt aac
atc tgc aaa tct ctg aat ctg ggt gat ga
tct tgg aga gca ggt acc ctg gga ac

Set 2
r2B2 probe
r2B2 invader
r2B2 stacker
r2B2 invader stacker

1548
1549
1550
1551

aac-gag-gcg-cac-acc-aat-tgg-ggc-aag
aac gac gcg cac acc aat tgg ggc aag
cct-gcc-cca-att-ggt-gtg-cgc-c-NH2
atg gtg tct ttg gtg act ctg tgt ggt aac

Set 3
r2B2 probe
r2B2 probe
r2B2 arrestor
r2B2 invader
SRT
FRET



| | | |
|---------------|---|------|
| Set 4 | aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-Pi | 1552 |
| r2B2 probe | ctt-gcc-cca-att-ggt-gtg-cgc-c-Pi | 1553 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac | 1554 |
| r2B2 invader | | |
| SRT | | |
| FRET | | |
| Set 5 | ctt gcc cca att ggt gtg cg-NH2 | 1555 |
| r2B2 arrestor | aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-NH2 | 1556 |
| r2B2 probe | atg gtg tct ttg gtg act ctg tgt ggt aac | 1557 |
| r2B2 invader | atc tgc aaa tct ctg aat ctc gtg gat ga | 1558 |
| r2B2 stacker | | |
| SRT | | |
| FRET | | |
| Set 6 | ggc-aac-gag-gca-cac-aaa-ttg-ggg-caa-g | 1559 |
| r2B2 probe | ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2 | 1560 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac | 1561 |
| r2B2 invader | | |
| SRT | | |
| FRET | | |
| Set 7 | aac gag gcg cac acc aat tgg ggc aag atc-NH2 | 1562 |
| r2B2 probe | gat ctt gcc cca att ggt gtg cg-NH2 | 1563 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac | 1564 |
| r2B2 invader | | |
| SRT | | |
| FRET | | |
| Set 8 | aac gag gcg cac acc aat tgg ggc aag-NH2 | 1565 |
| r2B2 probe | ctt gcc cga att ggt gtg cg-NH2 | 1566 |
| r2B2 arrestor | atg gtg tct ttg gtg act ctg tgt ggt aac | 1567 |
| r2B2 invader | atc tgc aaa tct ctg aat ctc gtg gat ga | 1568 |
| r2B2 stacker | | |
| SRT | | |
| FRET | | |
| Set 9 | cag tca cgt ctc atg gtg gcc tgt g-NH2 | 1569 |
| r2B2 probe | | |

1569 1568 1567 1566 1565 1564 1563 1562 1561 1560 1559 1558 1557 1556 1555 1554 1553 1552



1570
1571

gta tgg cat tt ggt acg atc atc aag ggc
cac agg cca tga gac g-NH2

r2B2 invader
r2B2 arrestor
SRT
FRET

1572
1573
1574
1575

cag tca cgt ctc aga gcc aat cac ctg-NH2
cga tca tca agg gat ggt ggc ctg tgc
cag gta att ggc tct gag acg-NH2
atc aat ctc ctt ttg gac tt ctc tgc g

Set 10
r2B2 probe
r2B2 invader
r2B2 arrestor
r2B2 stacker
SRT
FRET

1576
1577
1578
1579

cag tca cgt ctc aga gcc aat cac ct-NH2
cga tca tca agg gat ggt ggc ctg tgc
agg tga ttg gct ctg aga cg-NH2
gat caa tct cct tt gga ctt tct ctg c

Set 11
r2B2 probe
r2B2 invader
r2B2 arrestor
r2B2 stacker
SRT
FRET

1580

FAM-cag tca cgt ctc aga gcc aat cac ct-NH2

Set 12
r2B2 probe

1581
1582
1583
1584
1585

cag tca cgt ctc aga gcc aat cac c-NH2
ggt gat tgg ctc tga gac g-NH2
cga tca tca agg gat ggt ggc ctg tgc
gat caa tct cct tt gga ctt tct ctg c
tga tca atc tcc tt tgg act ttc tct gc

Set 13 / Set 14
r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker
r2B2 stacker
SRT
FRET

1586
1587
1588
1589

cag tca cgt ctc aga gcc aat cac-NH2
gtg att ggc tct gag acg-NH2
ctg atc aat ctc ctt ttg gac tt ctc tgc g
cga tca tca agg gat ggt ggc ctg tgc

Set 15
r2B2 probe
r2B2 arrestor
r2B2 stacker
r2B2 invader
SRT
FRET

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1590
1591
1592
1593

Set 16
r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker
SRT
FRET

cag tca cgt ctc aga ggc aat cac ct-NH2
agg tga ttg cct ctg aga cg-NH2
cga tca tca agg gat ggt ggc ctg tgc
gat caa tct cct ttg gga ctt tct ctg c

1594
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1597

Set 17
r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker
SRT
FRET

cag tca cgt ctc aga ggc aat cac ctg-NH2
cag ctg att gcc tct gag acg-NH2
cga tca tca agg gat ggt ggc ctg tgc
atc aat ctc ctt ttg gac ttg ctc tgc g

1598
1599
1600
1601

Set 18
r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker
SRT
FRET

ccg tca cgc ctc aga gcc aat cac ct-NH2
agg tga ttg gct ctg agg cg-NH2
cga tca tca agg gat ggt ggc ctg tgc
gat caa tct cct ttg gga ctt tct ctg c

1602
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1605

Set 19
r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker
SRT
FRET

ccg tca cgc ctc aga gcc aat cac c-NH2
ggg gat tgg ctg tga ggc g-NH2
cga tca tca agg gat ggt ggc ctg tgc
tga tca atc tcc ttg tgg act ttc tct gc

1606
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Set 20-21
r2B2 probe
r2B2 probe
r2B2 arrestor
r2B2 invader
r2B2 stacker

ccg tca cgc ctc aga gcc aat cac-NH2
ccg tca cgc ctc aga gcc aat cac
ctg att gcc tct gag ccg-NH2
cga tca tca agg gat ggt ggc ctg tgc
ctg atc aat ctc ctt ttg gac ttg ctc tgc g

1611 1612 1613 1614 1615 1616 1617 1618 1619 1620



Set 22

r2B2 probe
r2B2 invader
r2B2 arrestor
SRT
FRET

cag tca cgt ctc atg gtc aaa gta ctg tgg-NH2
gga agt gct cag gat tga agg tgt ctg gc
cca cag tac ttt gac cat gat gag acg-NH2

1611
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1613

Set 23

r2B2 probe
r2B2 arrestor
r2B2 invader
SRT
FRET

aac gag gcg cac atg gtc aaa gta ctg tgg-NH2
cca cag tac ttt gac cat gat ggc-NH2
gga agt gct cag gat tga agg tgt ctg gc

1614
1615
1616

r2B2 probe
r2B2 invader

cat acg gtt ggg cct gtg aga gc
cat ttt ggt acg atc aag gga tgg tc

1617
1618

r3A1 probe
r3A1 probe
r3A1 invader
r3A1 probe
r3A1 probe
r3A1 arrestor
r3A1 probe
r3A1 probe
r3A1 arrestor
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r3A1 probe
r3A1 probe
r3A1 probe

agg agc cac ggg tcc caa atc
FL-agg agc cac ggg tcc caa atc
tcc oct gtt tct tga aaa gtc cat gtg tga
F-tgg cgt agt cgg gtc cca aat c
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c
gat-ttg-gga-ccc-ggt-gcg-cc-NH2
aac-gag-gcg-cac-cgg-gtc-cca-aat-c-NH2
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c - NH2
gga ttt ggg acc cgt cgg cga - NH2
gga-ttt-ggg-acc-cgt-cgg-cg -NH2
gga ttt ggg acc cgt cgg c - NH2
gga ttt ggg acc cgt cgg - NH2
gat-ttg-gga-ccc-ggt-gcg-c-NH2
gat-ttg-gga-ccc-ggt-gcg-NH2
gat-ttg-gga-ccc-ggt-gcg-NH2
gat-ttg-gga-ccc-ggt-gcg-ccf-NH2
gat-ttg-gga-ccc-ggt-gcg-ccf-c-NH2

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aac gag gcg cac cgg gtc cca aat c-Pi

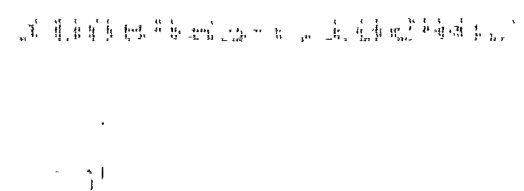
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| r3A1 invader | tcc cct gtt tct tga aaa gtc cat gtc tga | 1637 |
| r3A1 probe | aac gag gcg cac cgg gtc cca aat c-NH2 | 1638 |
| r3A1 arrestor | gat ttg gga ccc ggt ggc-NH2 | 1639 |
| r3A1 probe | aac gag gcg cac cgg gtc cca aat c-NH2 | 1640 |
| r3A1 arrestor | gga ttg ggc acc cgg tgc gc-NH2 | 1641 |
| r3A1 probe | aac gag gcg cac cgg gtc cca aat-NH2 | 1642 |
| r3A1 arrestor | att tgg gac cgg gtc cca aat-NH2 | 1643 |
| r3A1 stacker | cgg tag agg acc acc agg acg | 1644 |
| r3A1 probe | aac gag gcg cac cgg gtc cca aa-NH2 | 1645 |
| r3A1 arrestor | ttt ggc acc cgg tgc gc-NH2 | 1646 |
| r3A1 stacker | tcc gta gag gag cac cag ga | 1647 |
| r3A1 probe | cag tca cgt ctc cgg gtc cca aa-NH2 | 1648 |
| r3A1 arrestor | ttt ggc acc cgg aga cg-NH2 | 1649 |
| r3A1 stacker | tcc gta gag gag cac cag ga | 1650 |
| r3A1 probe | cgg tca cgc ctc cgg gtc cca aa-NH2 | 1651 |
| r3A1 arrestor | ttt ggc acc cgg agg cg-NH2 | 1652 |
| r3A1 stacker | tcc gta gag gag cac cag ga | 1653 |
| r3A1 stacker | tcc gta gag gag cac cag ga | 1654 |
| r3A1 probe | aac gag gcg cac cgg gtc cca-NH2 | 1655 |
| r3A1 arrestor | tgg gac cgg gtc cgc-NH2 | 1656 |
| r3A1 probe | cgg tca cgc ctc cgg gtc cca-NH2 | 1657 |
| r3A1 arrestor | tgg gac cgg gag gcg-NH2 | 1658 |
| r3A1 stacker | aat cgg tag agg agc acc agg | 1659 |
| r3A1 probe | aac gag gcg cac cgg gtc cca | 1660 |

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|---------------|--|------|
| r3A2 invader | ttc ctt gtt tct taa aaa ttc cat gtc taa | 1661 |
| r3A2 invader | att ttt cga tac tt tta tag cac tcc atc | 1662 |
| r3A2 probe | tgg cgt atc tgg gtt cca agt c | 1663 |
| r3A2 probe | aac gag gcg cac gtc aaa tct ccc taa | 1664 |
| r3A2 probe | aac-gag-gcg-cac-tgg-gtt-cca-agt-c | 1665 |
| r3A2 arrestor | tta ggc aga tt gac gtc cgc c - NH2 | 1666 |
| r3A2 arrestor | gac-ttg-gaa-ccc-agt-ggc-c-NH2 | 1667 |
| r3A2 probe | aac gag gcg cac tgg gtt cca agt c | 1668 |
| r3A2 probe | aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi | 1669 |
| r3A2 arrestor | gac ttg gaa ccc agt ggc-NH2 | 1670 |
| r3A2 probe | aac gag gcg cac tgg gtt cca agt cg-NH2 | 1671 |
| r3A2 arrestor | cga ctt gga acc cag tgc gc-NH2 | 1672 |
| r3A2 probe | aac gag gcg cac aac cat cca gtt cta ta-NH2 | 1673 |



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|---------------|--|------|
| r3A2 invader | gga atc gtc act act gac cct ttg ggt ata aac ac | 1674 |
| r3A2 stacker | tct ttt tta cag act ctc tca agt cta tta cc | 1675 |
| r3A2 arrestor | tat aga act tga tgg ttg tgc gcg-NH2 | 1676 |
| r3A2 probe | aac gag gcg cac aac cat caa gtt cta-NH2 | 1677 |
| r3A2 stacker | tat ctt ttt tac aga ctc tct caa gtc tat tac c | 1678 |
| r3A2 arrestor | tag aac ttg atg gtt gtc cgc-NH2 | 1679 |
| r3A2 probe | cag tca cgt ctc ctc ggc agg gc-NH2 | 1680 |
| r3A2 invader | cac aat atc gta ggt agg tgc ctt aa | 1681 |
| r3A2 arrestor | gcc ctg ccg agg aga cg-NH2 | 1682 |
| r3A2 probe | cag tca cgt ctc ctc ggc agg g-NH2 | 1683 |
| r3A2 stacker | ccc cat cga tct cct cct g | 1684 |
| r3A2 arrestor | ccc tgc cga gac g-NH2 | 1685 |
| r3A2 probe | cag tca cgt ctc ctc ggc agg-NH2 | 1686 |
| r3A2 stacker | gcc cca tgg atc tcc tcc | 1687 |
| r3A2 arrestor | ccf gcc gag gag acg-NH2 | 1688 |
| r3A2 probe | cag tca cgt ctc ctc ggc ag-NH2 | 1689 |
| r3A2 stacker | ggc ccc atc gat ctc ctc | 1690 |
| r3A2 arrestor | ctg ccg agg aga cg-NH2 | 1691 |
| r3A2 probe | cgg tca cgc ctc ctc ggc agg-NH2 | 1692 |
| r3A2 arrestor | ccf gcc gag gag gcg-NH2 | 1693 |
| r3A2 stacker | gcc cca tgg atc tcc tcc | 1694 |
| r3A2 probe | cgg tca cgc ctc ctc ggc agg | 1695 |

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|------------------|---|------|
| hICAM-1 probe | ccg tca cgc ctc ggc ttg tgt gtt c-NH2 | 1696 |
| hICAM-1 invader | ccg gga tag gtt cag ggc gtc | 1697 |
| hICAM-1 stacker | ggt ttc atg ggg gtc cct | 1698 |
| hICAM-1 arrestor | <u>gaa cac aca agc cga ggc g</u> | 1699 |
| hVCM-1 probe | ccg tca cgc ctc gcc ttt gtt tgg-NH2 | 1700 |
| hVCM-1 arrestor | cca aac aaa ggc gag gcg | 1701 |
| hVCM-1 invader | ggg caa cat tga cat aaa gfg ttt gcg tac tct c | 1702 |
| hVCM-1 stacker | ggt cga att cca tgt cat c | 1703 |
| hVCM-1 probe | ccg tca cgc ctc gcc ttt gtt tg-NH2 | 1704 |
| hVCM-1 arrestor | <u>caa aca aag gcg agg cg</u> | 1705 |
| hVCM-1 stacker | ggt tcg aat tcc atg tca tc | 1706 |
| hGAPDH probe | aac gag gcg cac gct cct gga aga tg-NH2 | 1707 |
| hGAPDH arrestor | cat ctt cca gga gcg tgc gcc-NH2 | 1708 |



1709

hgAPDH invader cac ttg att ttg gag gga tct ca

Secondary system oligos

| | |
|---------------|--|
| Capture Oligo | aaa agt ggc tcc t-(biotin)c |
| Capture Oligo | aaa aga ggc tcc gct-(biotin)c |
| Capture Oligo | aaa atg tac gcc gct-(biotin) c |
| Capture Oligo | aaa aga tac gcc aca gct-(biotin) c |
| Capture Oligo | aaa acc aac cgt atg aac t-(biotin) c |
| Capture Oligo | aaa atc ata cgc cac t-(biotin)c |
| SRT | cgg-agg-aag-cag-ttg-gtg-tgc-ctc-gtt-gcc-tt-NH2 |
| SRT | cgg agg aag cag ttg ttg ccc ctc ctc gtt aa-NH2 |
| SRT | cgg aag aag cag ttg ttg cgc ctc gtt aa-NH2 |
| SRT | cgg aag aag cag ttg ttg cgc ctc gtt aa-NH2 |
| SRT | cgg aag aag cag ttg ttg cgc ctc gtt aa |
| SRT | cgg aag aag cag ttg ttg cgc ctc gtt aa |
| SRT | cgg aag aag cag ttg ttg cgc ctc gtt aa |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg t-NH2 |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg a-NH2 |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg a |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg t |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg t |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg t |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg t |
| SRT | cgg aag aag cag ttg ttg gag gcg tga cgg a |
| FRET probe | FL-caa c(cy3)gc ttc ctc |
| FRET probe | FL-caa c(cy3)gc ttc ctc c |
| FRET probe | FL-caa-c(cy3)g-ctt-ctt-ccg |
| FRET probe | FL-caa-c(cy3)g-ctt-ctt-ccg-uul |
| FRET probe | FL-caa-c(cy3)g-ctt-ctt-ccg-uul-uul |
| FRET probe | FL-caa-c(cy3)g-ctt-ctt-ccg-NH2 |

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Launched in 1992

Oligo sequence descriptions:
5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications are defined in (), ASR of primary probes are underlined
C18ddC = C18 linker+dideoxy C, ddC = dideoxy C, Fl = Fluorescein

| Oligo Type | Oligo Sequence | SEQ ID NO |
|---------------------------------------|--|-----------|
| HUMAN IL-2 | | |
| Human IL-2 Probe | Fl- CGAAATTAATACGCCCTTCTGGGCAIGTAC -C18ddC | 1736 |
| Human IL-2 Probe | CGAAATTAATACGCCCTTCTGGGCAIGTAC -C18ddC | 1737 |
| Human IL-2 Invader | CTGAAGATGTTTCAGTTCCTGTG- ddC | 1738 |
| Human IL-2 Invader | GAAGATGTTTCAGTTCCTGTG | 1739 |
| Human IL-2 Probe | TCACCTCCTACCTTCTGGGCAIGTAA | 1740 |
| Human IL-2 Probe | TCACCTCCTACCTTCTGGGCAIGTAAAC | 1741 |
| Human IL-2 Probe | TCACCTCCTACCTTCTGGGCAIGTAA- C18ddC | 1742 |
| Human IL-2 Probe | GAAGATGTTTCAGTTCCTGTG- ddC | 1743 |
| Human IL-2 Invader | Fl- ACTTCCTACTTAATTCGATTCAAAATC | 1744 |
| Human IL-2 Probe | ACTTCCTACTTAATTCGATTCAAAATC - C18ddC | 1745 |
| Human IL-2 Invader | GAGTTTGGGATCTTGTAAATTAT- ddC | 1746 |
| Human IL-2 Probe | Fl- CGTGTCTCTGGCGTATCTTAATTCGATTCAAAATC | 1747 |
| Human IL-2 Probe | CGTGTCTCTGGCGTATCTTAATTCGATTCAAAATC | 1748 |
| Human IL-2 Probe | GAGTTTGGGATCTTGTAAATTAT - ddC | 1749 |
| Human IL-2 Invader | Fl- CGTGTCTCTGGCGTATCTTAATTCGATTCAAAATC | 1750 |
| Human IL-2 Probe | CGTGTCTCTGGCGTATCTTAATTCGATTCAAAATC | 1751 |
| Human IL-2 Probe | Fl- CGTGTCTCTGGCGTATCTTAATTCGATTCAAAATC | 1752 |
| Human IL-2 Probe | CGTGTCTCTGGCGTATCTTAATTCGATTCAAAATC | 1753 |
| Human IL-2 Probe | GAGTTTGGGATCTTGTAAATTAT- ddC | 1754 |
| HUMAN β-ACTIN | | |
| Human β -actin Probe | Fl- TTCCTACTCTTGATCTTCATCTG | 1755 |
| Human β -actin Invader | CTCAGGAGGAGCAATGATCTT | 1756 |
| Human β -actin Invader | CTCAGGAGGAGCAATGAT | 1757 |
| Human β -actin Probe | Fl- TCAGTTCCTACTCTGGGTCATCTCTG -C18ddC | 1758 |
| Human β -actin Probe | TCAGTTCCTACTCTGGGTCATCTCTG -C18ddC | 1759 |
| Human β -actin Invader | GTGTTGAAGGTCCTCAACATGAT- ddC | 1760 |
| Human β -actin Invader | GGGTGTTGAAGGTCCTCAACATGAT - ddC | 1761 |
| Human β -actin Probe | Fl- CGTGTCTCTGGCGTATCTGGGTCATCTCTG | 1762 |
| Human β -actin Probe | CGTGTCTCTGGCGTATCTGGGTCATCTCTG | 1763 |
| Human β -actin Invader | GGGTGTTGAAGGTCCTCAACATGAT - ddC | 1764 |
| HUMAN GAPDH | | |
| Human GAPDH Probe | Fl- TTCATACGGTTGGTAGTGGAGGCAATG | 1765 |
| Human GAPDH Probe | TTCATACGGTTGGTAGTGGAGGCAATG | 1766 |
| Human GAPDH Invader | GGAATCATATTGGACATGTAAACCATC | 1767 |
| Human GAPDH Probe | Fl- TTCATACGGTTGGTAGTGGAGGCAATG | 1768 |



1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806

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|-----------------------------|----------------------------------|------|
| Human GAPDH Probe | TTATACGGTTGGCTCCCTGGAAGATG | 1769 |
| Human GAPDH Invader | CACTTGATTTTGGAGGGATCTCA | 1770 |
| Human/Mouse/Rat GAPDH Probe | TTATACGGTTGGTAGTTGAGGTCAATG | 1771 |
| Mouse/Rat GAPDH Invader | AGAACTACTGGAACATGTAGACCATC | 1772 |
| Mouse GAPDH Probe | FI-TGGCGTATCAIGTAGIIGG | 1773 |
| Mouse GAPDH Probe | TGGCGTATCAIGTAGIIGG | 1774 |
| Mouse GAPDH Invader | GGAGTCATCTGGAACATGTAGACC | 1775 |
| Mouse GAPDH Probe | TGGCGTATCAIGTAGIIGG | 1776 |
| Mouse GAPDH Invader | AGTCATCTGGAACATGTAGACA | 1777 |
| Mouse GAPDH Invader | GGAGTCATCTGGAACATGTAGACA | 1778 |
| MOUSE IL-6 | | |
| Mouse IL-6 Probe | FI-TGGCGTATCICHTTCTCATI | 1779 |
| Mouse IL-6 Probe | TGGCGTATCICHTTCTCATI | 1780 |
| Mouse IL-6 Invader | ACAATCAGAAITGCCAATTCACAACA | 1781 |
| MOUSE ONCOSTATIN M | | |
| Mouse Oncostatin M Probe | FI-GAAGGCAGAGGACCGTGAGGC | 1782 |
| Mouse Oncostatin M Probe | GAAGGCAGAGGACCGTGAGGC | 1783 |
| Mouse Oncostatin M Invader | AAGACATCTGGTGTGTAGTGA | 1784 |
| Mouse Oncostatin M Probe | FI-TGGCGTATCTCCCGAGAGAAAGC | 1785 |
| Mouse Oncostatin M Probe | TGGCGTATCTCCCGAGAGAAAGC | 1786 |
| Mouse Oncostatin M Invader | CACTGAGCCGATGAAGCGATGTAA | 1787 |
| Mouse Oncostatin M Probe | FI-TGGCGTATCTAGGGCTCCCAAGG | 1788 |
| Mouse Oncostatin M Probe | TGGCGTATCTAGGGCTCCCAAGG | 1789 |
| Mouse Oncostatin M Invader | GTGTTCAAGTTTTGGAGCGGATAA | 1790 |
| Mouse Oncostatin M Probe | FI-TGGCGTATCTAGGGCTCCCAAG | 1791 |
| Mouse Oncostatin M Probe | TGGCGTATCTAGGGCTCCCAAG | 1792 |
| Mouse Oncostatin M Invader | GTGTTCAAGTTTTGGAGCGGATAA | 1793 |
| FRET Probe | FI-ATTCT(CY3)TCTCAGA-3'NH2 | 1794 |
| FRET Probe | FI-ATTCT(CY3)TCTCAGAC-3'NH2 | 1795 |
| FRET Probe | FI-ATTCT(CY3)TCTCAGACT-3'NH2 | 1796 |
| SRT | CAGTCTGAGATGAATGATACGCCAGG-3'NH2 | 1797 |
| Mouse Oncostatin M Arrestor | CTTGGAGCCCTAGATA-NH2 | 1798 |
| Mouse Oncostatin M Arrestor | CTTGGAGCCCTAGAT-NH2 | 1799 |
| Mouse Oncostatin M Arrestor | CTTGGAGCCCTAGA-NH2 | 1800 |
| Mouse Oncostatin M Probe | CTGGCGTATCTAGGGCTCCCA | 1801 |
| Mouse Oncostatin M Probe | CCTGGCGTATCTAGGGCTCCCA | 1802 |
| Mouse Oncostatin M Probe | GTGTTCAAGTTTTGGAGCGGATAA | 1803 |
| Mouse Oncostatin M Invader | CAGTCTGAGATGAATGATACGCCAGG-3'NH2 | 1804 |
| SRT | CTTGGAGCCCTAGAT-NH2 | 1805 |
| Arrestor | | |
| Mouse Oncostatin M Probe | FI-CTCTCTCGTCTCTAGGGCTCCCA | 1806 |



| | | |
|-----------------------------|------------------------------------|------|
| Mouse Oncostatin M Probe | CTCTCTCGTCTCTAGGGCTCCCA | 1807 |
| Mouse Oncostatin M Invader | GTGTTTCAGGTTTGGAGCGGATAA | 1808 |
| SRT | CAGTCTGAGATGAATGAGACGAGAGAGI-NH2 | 1809 |
| Mouse Oncostatin M Arrestor | CTTGGAGCCCTAGAG-NH2 | 1810 |
| Mouse Oncostatin M Probe | FI- TGGCGTATCTAGGGCTCCCA | 1811 |
| Mouse Oncostatin M Probe | TGGCGTATCTAGGGCTCCCA | 1812 |
| Mouse Oncostatin M Invader | GTGTTTCAGGTTTGGAGCGGATAA | 1813 |
| Mouse Oncostatin M Probe | TGGCGTATCTAGGGCTCCCA | 1814 |
| Mouse Oncostatin M Probe | TGGCGTATCTAGGGCTCCCA | 1815 |
| Mouse Oncostatin M Probe | CTGAGCCGATGAACGATGGTAA | 1816 |
| Mouse Oncostatin M Invader | TGGCGTATCTAGGGCTCCCA | 1817 |
| Mouse Oncostatin M Probe | GTGTTTCAGGTTTGGAGCGGATAA | 1818 |
| Mouse Oncostatin M Probe | CTCTCTCGTCTCTAGGGCTCCCA | 1819 |
| Mouse Oncostatin M Invader | GGCAGCTCTCAGGTCAGGTGTGA | 1820 |
| Mouse Oncostatin M Invader | AGCAGCTCTCAGGTCAGGTGTGA | 1821 |
| SRT | CAGTCTGAGATGAATGAGACGAGAGI-NH2 | 1822 |
| FRET Probe | FI-ATTCTCTCTCTAGAG-3'NH2 | 1823 |
| Mouse Oncostatin M Arrestor | CAAAACCTGAAGAG-3'NH2 | 1824 |
| Mouse Oncostatin M Arrestor | CAAAACCTGAAGAG-3'NH2 | 1825 |
| Mouse Oncostatin M Arrestor | CAAAACCTGAAGAG-3'NH2 | 1826 |
| Mouse Oncostatin M Probe | FI-CTCTCTCGTCTCTAGGGTTTG | 1827 |
| Mouse Oncostatin M Probe | CTCTCTCGTCTCTAGGGTTTG-NH2 | 1828 |
| Mouse Oncostatin M Invader | GGCAGCTCTCAGGTCAGGTGTGA | 1829 |
| Mouse Oncostatin M Slacker | GAGGCGGATATAGGGCT- Biotin TEG | 1830 |
| HUMAN ONCOSTATIN M | | |
| Human Oncostatin M Probe | CTCTCTCGTCTCTAGGGACTTAA | 1831 |
| Human Oncostatin M Probe | CTCTCTCGTCTCTAGGGACTTAA | 1832 |
| Human Oncostatin M Invader | GAAACAGGAGTGCAAGGACAGACA | 1833 |
| Human Oncostatin M Probe | TCACGTCTCTAGGGTTTG | 1834 |
| Human Oncostatin M Probe | GTACAGTCTCTAGGGTTTG | 1835 |
| Human Oncostatin M Probe | AGTCAGGTCCTCTAGGGTTTG | 1836 |
| Human Oncostatin M Probe | CAGTCAGGTCCTCTAGGGTTTG | 1837 |
| Human Oncostatin M Invader | AGGCAGCTCTCAGGTCAGGTGTGA | 1838 |
| FRET Probe 1 | FI-CAAC(CY3)GCTTCCTCCG | 1839 |
| SRT | CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2 | 1840 |
| SRT with mismatch | CGGAAGAGCAGTTGGAGACGTGACTGIGG-NH2 | 1841 |
| SRT with mismatch | CGGACGAAGCAGTTGGAGACGTGACTGIGG-NH2 | 1842 |



bold indicates 2' o-methyl bases

| Oligo Type | Oligo Sequence | Oligo # | SEQ ID NO |
|--------------------|--|-----------|-----------|
| SECONDARY SYSTEM: | | | |
| SET 1 | | | |
| FRET probe 1 | 5'-F-CAAC(CY3)GCTTCCTCCG-3' | DB04001F6 | 1843 |
| secondary target | 5'-CGGAAGAAGCAGTTGGTGGCGCTCGTTAA-NH2 | 649-10-01 | 1844 |
| SET 2 | | | |
| FRET probe 1 | 5'-F-CAAC(CY3)GCTTCCTCCG-3' | DB04001F6 | 1845 |
| secondary target | 5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3' | 641-60-03 | 1846 |
| h2C19 designs 2 | | | |
| probe | 5'-AACGAGGCGCAGATGCCATCGA-NH2-3' | 971-26-09 | 1847 |
| stacker | 5'-TCTTGGTGTCTTTACTTTCTC-3' | 971-26-12 | 1848 |
| invader | 5'-GCAATCAATAAAGTCCCGAGGGTTGTTTC | 971-26-11 | 1849 |
| arrestor | 5'-TCGATGGACATCGTGCGC-3' | 971-26-10 | 1850 |
| SET 1 | | | |
| h 2D6 p450 designs | | | |
| probe | 5'-CCGTCACGCCCTCTCACCCATCT-NH2-3' | 971-11-01 | 1851 |
| stacker | 5'-CTGGTCGCCGCACCT-3' | 971-11-04 | 1852 |
| invader | 5'-TGAGGGCATGTAGCCTGGA-3' | 971-11-03 | 1853 |
| arrestor | 5'-AGATGGGAGAGAGGCG-3' | 971-11-02 | 1854 |
| SET 2 | | | |
| probe | 5'-CCGTCACGCCCTCGAAGCCCTGT-NH2-3' | 971-11-05 | 1855 |
| stacker | 5'-ACTTCGATGTCACGGGATGTCATATGG-3' | 971-11-08 | 1856 |
| invader | 5'-GAGTGTGTTCCCTTAGGGATGCGC-3' | 971-11-08 | 1857 |
| arrestor | 5'-ACAGGGCTTCGAGGCG-3' | 971-11-06 | 1858 |
| SET 2 | | | |
| probe | 5'-CCGTCACGCCCTCCCTGCTGAGAAAG-NH2-3' | 971-11-09 | 1859 |
| stacker | 5'-GCAGGAAGCCCTCCG-3' | 971-11-12 | 1860 |
| invader | 5'-CCCCGAGGCATGCACGGCGGA-3' | 971-11-11 | 1861 |
| arrestor | 5'-CTTTCTCAGCAGGGAGGCG-3' | 971-11-10 | 1862 |
| SET 2 | | | |

1859 1860 1861 1862



h 2D6 shroter designs

probe 1051-12-06 1863
probe 1051-12-05 1864
probe 971-38-01 1865
invader 971-11-11 1866
stacker 971-38-03 1867
arrestor 971-38-02 1868
SET 2

probe 971-38-07 1869
invader 971-11-11 1870
stacker 971-38-09 1871
arrestor 971-38-08 1872
SET 2

probe 971-38-04 1873
invader 971-11-11 1874
stacker 971-38-06 1875
arrestor 971-38-05 1876
SET 2

probe 971-11-09 1877
invader 971-11-11 1878
stacker 971-11-12 1879
arrestor 971-11-10 1880
SET 2

h 2B6 p450 alt. Splice designs

probe 1051-48-01 1881
invader 971-01-03 1882
stacker 971-01-04 1883
arrestor 1051-48-02 1884
SET 1

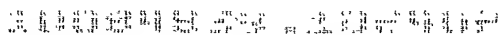
probe 1051-12-02 1885
probe 1051-12-01 1886
probe 971-01-01 1887
invader 971-01-03 1888
stacker 971-01-04 1889
arrestor 971-01-02 1890
SET 2

1891 1892 1893 1894 1895 1896 1897 1898 1899 1900



XXXXXXXXXXXXXXXXXXXX

| | | | | |
|--------------------------------|---------------------------------------|------------|--|------|
| SET 2 | | | | 1886 |
| probe | 5'-AACGAGGGCGCACCAGAGCTGATGAG-NH2-3' | 1051-48-03 | | 1887 |
| invader | 5'-GAGAAAGAGCTCAAAACAGCTGGCCGAATAA-3' | 971-01-10 | | 1888 |
| stacker | 5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3' | 971-01-11 | | 1889 |
| arrestor | 5'-CTCATCAGCTCTGGTGCGC-3' | 1051-48-04 | | |
| SET 1 | | | | |
| probe | 5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3' | 971-01-08 | | 1890 |
| | | 971-01-10 | | |
| | | 971-01-11 | | |
| | 5'-CTCATCAGCTCTGGAGGCG-3' | 971-01-09 | | 1891 |
| SET 2 | | | | |
| h 2B6 p450 alt splice designs2 | | | | |
| p | 5'-AACGAGGGCGCACCCCTTGGATTTC-NH2-3' | 1051-48-05 | | 1892 |
| i | 5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3' | 1051-48-10 | | 1893 |
| s | 5'-CGAAGCTCCTCTATCAG-3' | 1051-48-09 | | 1894 |
| a | 5'-GAAATCCAAGGGTGCGC-3' | 1051-48-06 | | 1895 |
| SET 1 | | | | |
| p | 5'-CCGTCACGCCTCCCTTGGATTTC-NH2-3' | 1051-48-07 | | 1896 |
| i | | 1051-48-10 | | |
| s | | 1051-48-09 | | |
| a | 5'-GAAATCCAAGGGAGGCG-3' | 1051-48-08 | | 1897 |
| SET 2 | | | | |
| p | 5'-AACGAGGGCGCACTGAGGGCC-NH2-3' | 1051-48-11 | | 1898 |
| i | 5'-GGAAAGAGGAAGGTGGGTCCAA-3' | 1051-48-16 | | 1899 |
| s | 5'-CCCTTGGATTCCGAAG-3' | 1051-48-15 | | 1900 |
| a | 5'-GGCCCTCAGTGCGC-3' | 1051-48-12 | | 1901 |
| SET 1 | | | | |
| p | 5'-CCGTCACGCCTCTGAGGGCC-NH2-3' | 1051-48-13 | | 1902 |
| i | | 1051-48-16 | | |
| s | | 1051-48-15 | | |
| a | 5'-GGCCCTCAGAGGCG-3' | 1051-48-14 | | 1903 |
| SET 2 | | | | |
| h2B6 p450 alt. Splice designs4 | | | | |



h2B6 p450 designs



1926

971-01-09

5'-CTCATCAGCTCTGGAGGCG-3'

arrestor
SET 2

h2b6p450 designs 2

1927
1928
1929
1930

971-01-12
971-01-13
971-01-14
971-01-15

5'-CCGTCACGCCTCAGATGACTGCC-NH2-3'
5'-GGAGAAGGTCGGAAATCTCTGAATCTCATC-3'
5'-TCTGTGTATGGCATTTGGCTCGG-3'
5'-GGCAGTCATCTGAGGCG-3'

probe
invader
stacker
arrestor
SET 2

h 2C19 designs 1

1931
1932
1933
1934

971-26-01
971-26-03
971-26-04
971-26-02

5'-CCGTCACGCCTCCATCCTTAATATCTAT-NH2-3'
5'-GAGAGATTGGTTAAGGATTTGCTGAA-3'
5'-CTGTAGGATATTTCCAATCACTGGG-3'
5'-ATAGATATTAAGGATGGAGGCG-3'

probe
invader
stacker
arrestor
SET 2

1935
1936
1937
1938

971-26-05
971-26-07
971-26-08
971-26-06

5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'
5'-CATATCCATGCAGCACCCACCATGA-3'
5'-CAAAATACAGAGTGAACACAGGGCC-3'
5'-GCCTGGAACGGTGCGC-3'

probe
invader
stacker
arrestor
SET 1

h2C19 shorter site 2 designs

1939
1940
1941
1942

971-68-01
971-26-07
971-68-03
971-68-02

5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'
5'-CATATCCATGCAGCACCCACCATGA-3'
5'-CCAAAATACAGAGTGAACACAGGGCC-3'
5'-CCTGGAACGGTGCGC-3'

probe
invader
stacker
arrestor
SET 1

1943
1944
1945
1946
1947

971-26-05
1051-12-03
1051-12-04
971-26-07
971-68-04
971-26-05

5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'
5'-AACGAGGGCGCACCGTTCCAGGC-3'
5'-AACGAGGGCGCACCGTTCCAGGC-HEX-3'
5'-CAAAATACAGAGTGAACACAGGGCC-3'
5'-GCCTGGAACGGTGCGC-3'

probe
invader
stacker
arrestor
SET 1

rat 1A1, rat 1A2
probe

Rat 1A1 site 1 bs. 639-700
5'-CCGTCACGGCCTCAGATTGACTATGCTG-NH2-3'

1948

500-58-01

1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000



1949
1950
1951

500-58-03
500-58-04
500-58-02

5'-CAGTAACCTCCCAAACTCATTGCTTC-3'
5'-AGCAGCTCTTGGTCATCGT-3'
5'-CAGCATAGTCAATCTGAGGCG-3'

invader
stacker
arrestor
SET 2

1952
1953
1954
1955

500-58-05
500-58-07
500-58-08
500-53-06

Rat 1A2 site 1 bs. 674-725
5'-AACGAGGCGCACTGACATTCTCCAC-NH2-3'
5'-GTCCACAGCATTCCCTGAGGA-3'
5'-AAAGTCCTTGCTGCTCTTC-3'
5'-GTGGAGAAATGTCAGTGCGC-3'

rat 1A2
probe
invader
stacker
arrestor
SET 1

1956
1957
1958
1959

500-49-05
500-49-03
r2B1, 2B2 500-49-07
500-49-06

5'-AACGAGGCGCACTGGCTTGACACA-NH2-3'
5'-GTCAATGTCTTGGAGCCAAA-3'
5'-GAGAAGTTCTGGAGGATGGTGG-3'
5'-TGTGTCAAGCCAGTGCGC-3'

rat 2B1-2B2 patent
probe
invader
stacker
arrestor
SET 1

1960
1961
1962

500-49-01
500-49-03
r2B1, 2B2 500-49-04
500-49-02

5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3'
5'-AGAAGTTCTGGAGGATGGTGG-3'
5'-CTGTGTCAAGCCAGTGCGC-3'

probe
invader
stacker
arrestor
SET 1

1963
1964
1965
1966

500-49-12
500-49-10
500-49-14
500-49-13

PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528)
5'-AACGAGGCGCACGAGGAACAATTTCATT-NH2-3'
5'-GTTCTGGAGGATGGTGAAGAAC-3'
5'-CGGGCAATGCCTTCG-3'
5'-AAATGAATTGTTCTCGTGCGC-3'

rat 2B1-2B2 site 4
probe
invader
stacker
arrestor
SET 2

1967
1968
1969

500-49-08
500-49-10
500-49-11
500-49-09

5'-AACGAGGCGCACGAGGAACAATTTCATT-NH2-3'
5'-GGGCAATGCCTTCG-3'
5'-GAAATGAATTGTTCTCGTGCGC-3'

probe
invader
stacker
arrestor
SET 1

1970

500-49-15

5'-AACGAGGCGCACAGCTGAGAGCAG-NH2-3'

rat 2B1-2B2 ,5 patent
probe



invader 5'-GCCTCAGCCGGATCACCGC-3' 1971
invader 5'-GCCTCAGCCCGATCACCGC-3' 1972
stacker 5'-ATCTGGTACGTTGGAGGTATT-3' 1973
stacker 5'-ATCTGGTATGTTGGAGGTATT-3' 1974
arrestor 5'-CTGCTTCTCAGCTCTGCCG-3' 1975
NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2
SET 1

r2B1, 500-49-17
r2B2, 500-49-18
r2B1 500-49-20
r2B2 500-49-21
500-49-16

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (570C)
p 5'-CCGTCACGCCCTCGTCGAAACGTTTGT-NH2 1976
i 5'-CCTCAGACACTTCTTGTCATTGTAC-3' 1977
s 5'-GAAGAGGATATCCGCAATGACATTGC-3' 1978
a 5'-AACAAACGTTTCGACGAGGCG-3' 1979
SET 2

500-40-04
500-40-02
500-40-05
500-40-06

p 5'-CCGTCACGCCCTCGTCGAAACGTTTGTGAAG-NH2-3' 1980
i
s
a 5'-CTTCAACAACGTTTCGACGAGGCG-3' 1981
SET 2

500-40-01
500-40-02
500-40-05
500-40-03

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (822G) (designed over splice junction #5)
p 5'-CCGTCACGCCCTCCTCCATCTCTATG-NH2-3' 1982
i 5'-GTTCTTGGCTGTGTTTTCCTTA-3' 1983
s 5'-AGGAGACAGTCAGTCACATC-3' 1984
a 5'-CATAGAGATGGAGGAGGCG-3' 1985
SET 2

500-40-10
500-40-08
500-40-11
500-40-12

p 5'-CCGTCACGCCCTCCTCCATCTCTATGAG-NH2-3' 1986
i
s
a 5'-CTCATAGAGATGGAGGAGGCG-3' 1987
SET 2

500-40-07
500-40-08
500-40-11
500-40-09

Rat 2E1 PROBE SET (969G)
probe Designed over splice junction #6 1988
invader 5'-CCGTCACGCCCTCCTCTCAATTTCTG-HEX-3' 1989
stacker 5'-CCCTGTCAATTTCTTCATGAAGTTTA-3' 1990
arrestor 5'-GGTATTTTCATGAGGATCAGGAGC-3' 1991
SET 2 5'-CCAGAAATTGAAGAGGAGGCG-3'

1073-19-06
500-40-14
500-40-17
500-40-15

1982
1983
1984
1985
1986
1987
1988
1989
1990
1991



| | | | |
|--------------------------|---------------------------------------|---------------------------------|------|
| probe | 5'-CCGTCACGCCCTCCTCTTCAATTTCTG-3' | 1073-19-05 | 1992 |
| probe | 5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2-3' | 500-40-16 | 1993 |
| probe | 5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2 | 500-40-13 | 1994 |
| invader | | 500-40-14 | |
| stacker | | 500-40-17 | |
| arrestor | | 500-40-18 | 1995 |
| SET 2 | | | |
| Rat 2E1 PROBE SET (969G) | Designed over splice junction #6 | | |
| probe | 5'-CCGTCACGCCCTCCTCTTCAATTTCT-NH2-3' | 500-73-01 | 1996 |
| invader | 5'-CCCTGTCAATTTCTTCATGAAGTTTA-3' | 500-40-14 | 1997 |
| stacker | 5'-GGGTATTTTCATGAGGATCAGGAG-3' | 500-73-03 | 1998 |
| arrestor | 5'-AGAAATTGAAGAGGAGGCG-3' | 500-73-02 | 1999 |
| SET 2 | | | |
| rat 3A's design 2 | | | |
| probe | 5'-CCGTCACGCCCTCGTTCTGGGT-NH2-3' | 500-43-15 | 2000 |
| invader | 5'-GAGCAAACTCATGCCAATGCAC-3' | r3A1, 3A18 500-43-23 | 2001 |
| invader | 5'-GAGCAAACTCATGTCAATGCAC-3' | r3A2 500-43-24 | 2002 |
| invader | 5'-GAGCAAACTCATGCCAATACAC-3' | r3A2 500-43-24 | 2003 |
| stacker | 5'-CCATTTCCAAAGGGCAG-3' | short r3A1, 3A2, 3A18 500-43-19 | 2004 |
| stacker | 5'-CCATTTCCAAAGGGCAG-3' | short r3A9 500-43-20 | 2005 |
| arrestor | 5'-ACCCAGGAACGAGGCG-3' | 500-43-16 | 2006 |
| SET 2 | | | |
| probe | 5'-CCGTCACGCCCTCGTTCTGGGT-NH2-3' | 500-43-13 | 2007 |
| invader | | r3A1, 3A18 500-43-23 | |
| invader | | r3A2 500-43-24 | |
| arrestor | | 500-43-14 | 2008 |
| SET 2 | | | |
| rat 3A's desing 3 | | | |
| probe | 5'-CCGTCACGCCCTCTGAGAGCAACCT-NH2-3' | 500-43-29 | 2009 |
| invader | 5'-AGAGCGAGTTTCATATTCAA-3' | r3A1, 3A2 500-43-35 | 2010 |
| invader | 5'-AGAGCAACTTTCATGTTCAA-3' | r3A9 500-43-36 | 2011 |
| invader | 5'-ACAGCAAGTTTCATGCTGAA-3' | r3A18 500-43-37 | 2012 |
| stacker | 5'-CATGCCAATGCAGTTCCTG-3' | r3A1, 3A18 500-43-31 | 2013 |
| stacker | 5'-CATGCAATGCAGTTCCTG-3' | r3A2 500-43-32 | 2014 |
| stacker | 5'-CATGCCAATACAGTTCCTG-3' | r3A9 500-43-33 | 2015 |

1073-19-05
500-40-16
500-40-13
500-40-14
500-40-17
500-40-18
500-73-01
500-40-14
500-73-03
500-73-02
500-43-15
r3A1, 3A18 500-43-23
r3A2 500-43-24
r3A2 500-43-24
short r3A1, 3A2, 3A18 500-43-19
short r3A9 500-43-20
500-43-16
500-43-13
r3A1, 3A18 500-43-23
r3A2 500-43-24
500-43-14
500-43-29
r3A1, 3A2 500-43-35
r3A9 500-43-36
r3A18 500-43-37
r3A1, 3A18 500-43-31
r3A2 500-43-32
r3A9 500-43-33



| | | | |
|---|---|---|--|
| arrestor
SET 2 | 5'-AGGTTTGCTCTCCGAGGCG-3' | 500-43-30 | 2016 |
| probe
invader
invader
invader
arrestor
SET 2 | 5'-CCGTACAGCCTCTGAGAGCAACCTCA-NH2-3'

5'-TGAGGTTTGCTCTCAGAGGCG-3' | 500-43-27
r3A1, 3A2 500-43-35
r3A9 500-43-36
r3A18 500-43-37
500-43-28 | 2017

2018 |
| rat 3A's designs
probe
invader
invader
invader
s
s
a
SET 2 | 5'-CCGTACAGCCTCGGAACATCTCCT-NH2-3'
5'-TGCTCCATAGTTCAATGATGGC-3'
5'-TATCTGTACTGGTTAATGATGGC-3'
5'-TATCTCCATAGTTCTCATGAGGGC-3'
5'-TGAGCTTCCACTGGTG-3'
5'-TGAGCTTCCACTGGTG-3'
5'-TGAGTTGCCACTGGTG-3' | 500-43-03
r3A1, 3A2 500-43-09
r3A9 500-43-10
r3A18 500-43-11
r3A1, 3A2 500-43-05
r3A9 500-43-06
r3A18 500-43-07 | 2019
2020
2021
2022
2023
2024
2025 |
| probe
invader
invader
invader
arrestor
SET 2 | 5'-CCGTACAGCCTCGGAACATCTCCTTGA-NH2-3'

5'-TCAAGGAGATGTTCCGAGGCG-3' | 500-43-01
r3A1, 3A2 500-43-09
r3A9 500-43-10
r3A18 500-43-11
500-43-02 | 2026

2027 |
| rat 3A's design 2b
probe
invader
invader
invader
stacker
stacker
arrestor
SET 2 | 5'-CCGTACAGCCTCGTTCTGGG-NH2-3'
5'-GAGCAAACTCATGCCAATGCAC-3'
5'-GAGCAAACTCATGTCAATGCAC-3'
5'-GAGCAAACTCATGCCAATACAC-3'
5'-TCCATTTCCAAAGGGCAG-3'
5'-TCCATTTCCAAAGGGCAG-3'
5'-CCCAGGAACGAGGCG-3' | 991-39-01
r3A1, 3A18 500-43-23
r3A2 500-43-24
r3A9 500-43-25
r3A1, 3A2, 3A18 991-39-03
r3A9 991-39-04
991-39-02 | 2028
2029
2030
2031
2032
2033
2034 |
| rat or human 1A1 shorter site 2
probe
probe | 5'-CCGTACAGCCTCCTGTCTGTGAT-HEX-3'
5'-CCGTACAGCCTCCTGTCTGTGAT-3' | 1073-19-02
1073-19-01 | 2035
2036 |

2037
2038
2039
2040
2041
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|-------------------------|-------------------------------------|-------------------------|------|
| probe | 5'-CCGTCACGCCCTCCTGTCTGTGAT-NH2-3' | 991-12-04 | 2037 |
| invader | 5'-TCCTGACAATGCTCAATGAGGA-3' | r 1A1 500-53-11 | 2038 |
| invader | 5'-TCCTGACAGTGCTCAATCAGGA-3' | h 1A1 500-53-12 | 2039 |
| stacker | 5'-GTCCCGGATGTGGCCC-3' | rat/human 1A1 991-12-06 | 2040 |
| arrestor | 5'-ACATCACAGACAGGAGGCG-3' | 500-53-10 | 2041 |
| SET 2 | | | |
| probe | 5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3' | 991-12-01 | 2042 |
| invader | | r 1A1 500-53-11 | |
| invader | | h 1A1 500-53-12 | |
| stacker | 5'-TCCCGGATGTGGCCCT-3' | rat/human 1A1 991-12-03 | 2043 |
| arrestor | 5'-CATCACAGACAGGAGGCG-3' | 991-12-02 | 2044 |
| SET 2 | | | |
| probe | 5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3' | 500-53-09 | 2045 |
| invader | | r 1A1 500-53-11 | |
| invader | | h 1A1 500-53-12 | |
| stacker | 5'-GTCCCGGATGTGGCCC-3' | rat/human 1A1 991-12-06 | 2046 |
| arrestor | 5'-ATCACAGACAGGAGGCG-3' | 991-12-05 | 2047 |
| SET 2 | | | |
| rat or human 1A1 site 1 | | | |
| probe | 5'-CCGTCACGCCCTCTGGCCCTTC-NH2-3' | 500-53-04 | 2048 |
| invader | 5'-CTGTCTGTGATGTCCGGATGA-3' | 500-53-03 | 2049 |
| stacker | 5'-TCAAATGTCCTGTAGTGCTC-3' | rat 1A1 500-53-06 | 2050 |
| stacker | 5'-TCAAAGGTTTTGTAGTGCTC-3' | human 1A1 500-53-07 | 2051 |
| arrestor | 5'-GAAGGGCCAGAGGCG-3' | 500-53-05 | 2052 |
| SET 2 | | | |
| probe | 5'-CCGTCACGCCCTCTGGCCCTTCTC-NH2-3' | 500-53-01 | 2053 |
| invader | | 500-53-03 | |
| arrestor | 5'-GAGAAGGGCCAGAGGCG-3' | 500-53-02 | 2054 |
| SET 2 | | | |
| Rat/Human 1A1 site 2 | | | |
| probe | 5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3' | 500-53-09 | 2055 |
| invader | 5'-TCCTGACAATGCTCAATGAGGA-3' | r 1A1 500-53-11 | 2056 |
| invader | 5'-TCCTGACAGTGCTCAATCAGGA-3' | h 1A1 500-53-12 | 2057 |
| stacker | 5'-CCCGGATGTGGCCCT-3' | rat/human 1A1 500-53-14 | 2058 |
| arrestor | 5'-ACATCACAGACAGGAGGCG-3' | 500-53-10 | 2059 |

Patent & Trademark Office



SET 2

rat or human 1A2 sites

probe
probe
probe
invader
invader
arrestor
SET 1

5'-AACGAGGGCGCACGGACTGTTTTCTGC-HEX-3'
5'-AACGAGGGCGCACGGACTGTTTTCTGC-3'
5'-AACGAGGGCGCACGGACTGTTTTCTGC-NH2-3'
5'-CTTGTTGAAGCTTTGATAGTGTCTCCTC-3'
5'-CTTGTCAAAGTCCTGATAGTGTCTCCTC-3'
5'-GCAGAAAAACAGTCCGTGCGC-3'

1073-19-04
1073-19-03
500-53-15
rat 1A2 500-53-17
human 1A2 500-53-18
500-53-16

2060
2061
2062
2063
2064
2065

shorter h2C19 design site 3

probe
invader
stacker
arrestor
SET 1

5'-AACGAGGGCGCACGGATGTCCATCG-NH2-3'
5'-GCAATCAATAAAGTCCCGAGGGTTGTTC-3'
5'-ATTCTTGGTGTCTTTTACTTTCTC-3'
5'-CGATGGACATCGTGCGC-3'

971-48-01
971-26-11
971-48-03
971-48-02

2066
2067
2068
2069

5'-AACGAGGGCGCACGGACTGTTTTCTGC-HEX-3'



Human IL-10

| Oligo Type | Sequence | Oligo Number | Secondary Cassette | Comments | SEQ ID NO |
|------------|------------------------------------|--------------|--------------------|--|-----------|
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-31-01 | FV-1 & FV-2 | 3' amine | 2070 |
| arrestor | agccatgagtgagttggtg | 511-31-02 | | All 2'Ome + 3' amine arrestor for 511-31-01 | 2071 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-30-01 | FV-1 & FV-2 | 3' amine | 2072 |
| arrestor | gocagagtgagttggtg | 511-30-02 | | All 2'Ome + 3' amine arrestor for 511-30-01 | 2073 |
| arrestor | gocagagtgagttggtg | 380-89-02 | | All 2'Ome Same as 380-82-02 | 2074 |
| arrestor | gocagagtgagttggtg | 380-89-04 | | All 2'Ome Same as 380-82-04 | 2075 |
| arrestor | gocagagtgagttggtg | 380-89-06 | | All 2'Ome Same as 380-82-06 | 2076 |
| arrestor | gocagagtgagttggtg | 380-89-08 | | All 2'Ome Same as 380-82-08 | 2077 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-67-01 | FV-1 & FV-2 | 3' amine | 2078 |
| stacker | cttgatcagtcctctctgagc | 781-79-01 | | stacker for 511-67-01 All 2'Ome | 2079 |
| arrestor | ccatgagtgagttggtg | 781-79-02 | FV-1 & FV-2 | all 2'Ome arrestor for 511-67-01 | 2080 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 781-80-01 | | 3' amine | 2081 |
| stacker | gcttgatcagtcctctctgag | 781-80-02 | | stacker for 781-80-01 All 2'Ome | 2082 |
| arrestor | catgagtgagttggtg | 781-80-03 | FV-1 & FV-2 | all 2'Ome arrestor for 781-80-01 | 2083 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 781-81-01 | | 3' amine | 2084 |
| stacker | gcttgatcagtcctctctgag | 781-81-02 | | stacker for 781-81-01 All 2'Ome | 2085 |
| stacker | gcttgatcagtcctctctgag | 938-74-01 | | stacker for 781-81-01 All 2'Ome to replace 781-81-02 | 2086 |
| arrestor | atgagtgagttggtg | 781-81-03 | | all 2'Ome arrestor for 781-81-01 | 2087 |
| probe | ccgtcagcgcctccaaactcactcattggt-NH2 | 938-46-02 | MO4-1/MO4-2/MO4-3 | same as 938-46-01 w/ 3' amine | 2088 |
| arrestor | atgagtgagttggtg | 938-46-03 | | all 2'Ome arrestor for 938-46-01&02 | 2089 |
| invader | taggctctcagtgagtgatgaagatga | 380-59-02 | | | 2090 |
| invader | gtcagtgagctctcagtgagtgatga | 511-32-01 | | longer invader 380-59-02 | 2091 |

Mouse IL-4

| Oligo Type | Sequence | Oligo Number | Secondary Cassette | Comments | SEQ ID NO |
|------------|------------------------------------|--------------|--------------------|---|-----------|
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-14-01 | FV-1 & FV-2 | | 2092 |
| arrestor | cgagtgagtgagttggtg | 511-14-02 | | All 2'Ome + 3' amine arrestor for 511-14-01 | 2093 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-12-01 | FV-1 & FV-2 | 458-34-01 with 3' amine | 2094 |
| arrestor | aggtcacagagagagag | 511-02-01 | MO2 | All 2'Ome + 3' amine arrestor for 458-34-01 | 2095 |
| arrestor | aggtcacagagagagag | 511-16-01 | | 3' amine | 2096 |
| arrestor | aggtcacagagagagag | 511-16-02 | | All 2'Ome + 3' amine arrestor for 511-16-01 | 2097 |
| arrestor | aggtcacagagagagag | 511-50-01 | MISC-1 | All 2'Ome + 3' amine arrestor for 511-16-01 | 2098 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 458-35-01 | | | 2099 |
| arrestor | aggtcacagagagagag | 511-03-01 | MISC-1 | All 2'Ome + 3' amine arrestor for 458-35-01 | 2100 |
| probe | ccagtgagtgagttggtg | 458-35-02 | | | 2101 |
| arrestor | aggtcacagagagagag | 511-04-01 | MISC-2 | All 2'Ome + 3' amine arrestor for 458-36-01 | 2102 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 458-36-01 | | | 2103 |
| arrestor | aggtcacagagagagag | 511-13-01 | FV-1 & FV-2 | | 2104 |
| arrestor | aggtcacagagagagag | 511-13-02 | | | 2105 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 781-71-01 | FV-1 & FV-2 | 3' amine | 2106 |
| stacker | ctcgttgatcagtcctctctgag | 781-71-02 | | All 2'Ome for 781-71-01 | 2107 |
| arrestor | atcagtgagttggtg | 781-71-03 | | All 2'Ome arrestor for 781-71-01 | 2108 |
| invader | atcagtgagttggtg | 380-32-01 | | | 2109 |
| invader | atcagtgagttggtg | 380-32-02 | | Same as 380-32-01 but underlined base is mismatch to sequence | 2110 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-44-01 | FV-1 & FV-2 | 3' amine | 2111 |
| arrestor | gacagtgagttggtg | 511-44-02 | | All 2'Ome + 3' amine arrestor for 511-44-01 | 2112 |
| probe | aacgagggcgacacaaactcactcattggt-NH2 | 511-68-01 | FV-1 & FV-2 | 3' amine | 2113 |
| arrestor | atcagtgagttggtg | 511-68-02 | | All 2'Ome + 3' amine arrestor for 511-68-01 | 2114 |
| invader | gacagtgagttggtg | 511-45-01 | MO4-1/MO4-2/MO4-3 | | 2115 |
| probe | ccgtcagcgcctccaaactcactcattggt-NH2 | 511-46-01 | | 3' amine | 2116 |



| | | | | |
|----------|-----------|-------------------|--|------|
| arrestor | 511-46-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome + 3' amine arrestor for 511-46-01 | 2117 |
| probe | 511-69-01 | MO4-1/MO4-2/MO4-3 | 3' amine | 2118 |
| arrestor | 511-69-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome + 3' amine arrestor for 511-69-01 | 2119 |
| probe | 781-68-01 | MO4-1/MO4-2/MO4-3 | 3' amine | 2120 |
| stacker | 781-68-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome stacker for 781-68-01 | 2121 |
| arrestor | 781-68-03 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-68-01 | 2122 |
| probe | 781-69-01 | MO4-1/MO4-2/MO4-3 | 3' amine | 2123 |
| stacker | 781-69-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome stacker for 781-69-01 | 2124 |
| arrestor | 781-69-03 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-69-01 | 2125 |
| invader | 511-47-01 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-69-01 | 2126 |

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|----------|-----------|-----|--|------|
| probe | 511-17-01 | MO2 | 3' amine | 2127 |
| arrestor | 511-17-02 | MO2 | All 2'-Ome + 3' amine arrestor for 511-17-01 | 2128 |
| invader | 511-18-01 | MO2 | All 2'-Ome + 3' amine arrestor for 511-17-01 | 2129 |

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|----------|-----------|-------------------|-----------------------------------|------|
| probe | 781-83-01 | TT-1/TT-2 | 3' amine | 2130 |
| arrestor | 781-83-02 | TT-1/TT-2 | All 2'-Ome arrestor for 781-83-01 | 2131 |
| probe | 781-82-01 | MO4-1/MO4-2/MO4-3 | 3' amine | 2132 |
| invader | 781-82-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-82-01 | 2133 |
| arrestor | 781-82-03 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-82-01 | 2134 |

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|----------|-----------|-------------------|-----------------------------------|------|
| probe | 781-84-01 | MO4-1/MO4-2/MO4-3 | 3' amine | 2135 |
| invader | 781-84-02 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-84-01 | 2136 |
| arrestor | 781-84-03 | MO4-1/MO4-2/MO4-3 | All 2'-Ome arrestor for 781-84-01 | 2137 |

Mouse IL-2

| | |
|------------|-------------------------------|
| Oligo Type | Sequence |
| probe | cagtcacgctctctctctctct-NH2 |
| arrestor | agagtaactgtgtgtgtgtgtgtgt-NH2 |
| invader | gcactcaaaagtggtgtgtgtgtgtgt |

Mouse IFN- γ

| | |
|------------|------------------------------|
| Oligo Type | Sequence |
| probe | cagtcacgctctctctctctct-NH2 |
| arrestor | ggaactgtgtgtgtgtgtgtgtgt-NH2 |
| probe | cagtcacgctctctctctctct-NH2 |
| arrestor | ggaactgtgtgtgtgtgtgtgtgt-NH2 |
| probe | cagtcacgctctctctctctct-NH2 |
| arrestor | aactgtgtgtgtgtgtgtgtgt-NH2 |
| invader | gcactcaaaagtggtgtgtgtgtgtgt |

Human TNF- α

| | |
|------------|-----------------------------------|
| Oligo Type | Sequence |
| probe | cagtcacgctctctctctctct-NH2 |
| arrestor | cagtcacgctctctctctctct-NH2 |
| probe | cagtcacgctctctctctctct-NH2 |
| arrestor | cagtcacgctctctctctctct-NH2 |
| invader | ctt gtc act cgg ggt tga aga tga a |

Human IL-1 β

| | |
|------------|-----------------------------|
| Oligo Type | Sequence |
| probe | gcactcaaaagtggtgtgtgtgtgtgt |

2141
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2151
2152

2153



2154
2155
2156

All 2'-One + 3' amine arrestor for 511-79-01
All 2'-One + 3' amine arrestor for 511-79-01

511-80-01
511-80-02
685-23-01

arrestor ggccataacagagagagcgt
arrestor ggccataacagagagagcgtga
invader caggctcggagagagcacta

Human IL-6

| Oligo Type | Sequence | Oligo Number | Secondary Cassette | Comments | |
|------------|---|--------------|--------------------|--|------|
| probe | ggcgacgcctctctcattgaatcct-NH2 | 511-81-01 | MO4-1/MO4-2/MO4-3 | 3' amine (based on 685-16-01) | 2157 |
| arrestor | aggattcaatgagagagagcgtga | 511-82-01 | | All 2'-One + 3' amine arrestor for 511-81-01 | 2158 |
| arrestor | aggattcaatgagagagagcgt | 511-82-02 | | All 2'-One + 3' amine arrestor for 511-81-01 | 2159 |
| probe | ggcgacgcctctctcattgaatcct-NH2 | 781-27-01 | MO4-1/MO4-2/MO4-3 | 3' amine (511-81-01 with new arm) | 2160 |
| arrestor | aggattcaatgagagagagcgt | 781-27-02 | | All 2'-One + 3' amine arrestor for 781-27-01 | 2161 |
| probe | ggcgacgcctctctcattgaatcct-NH2 | 511-83-01 | MO4-1/MO4-2/MO4-3 | 3' amine (based on 685-16-01) | 2162 |
| arrestor | ggattcaatgagagagagcgtga | 511-84-01 | | All 2'-One + 3' amine arrestor for 511-81-01 | 2163 |
| arrestor | ggattcaatgagagagagcgt | 511-84-02 | | All 2'-One + 3' amine arrestor for 511-81-01 | 2164 |
| probe | ggcgacgcctctctcattgaatcct-NH2 | 781-28-01 | MO4-1/MO4-2/MO4-3 | 3' amine (511-83-01 with new arm) | 2165 |
| arrestor | ggattcaatgagagagagcgt | 781-28-02 | | All 2'-One + 3' amine arrestor for 781-28-01 | 2166 |
| probe | ggcgacgcctctctcattgaatcct-NH2 | 781-29-01 | MO4-1/MO4-2/MO4-3 | 3' amine (1 base shorter than 781-28-01) | 2167 |
| arrestor | ggattcaatgagagagagcgt | 781-29-02 | | All 2'-One + 3' amine arrestor for 781-29-01 | 2168 |
| probe | ggcgacgcctctctcattgaatcct-NH2 | 781-30-01 | TT-1/TT-2 | 3' amine (781-29-01 with new arm) | 2169 |
| arrestor | ggattcaatgagagagagcgt | 781-30-02 | | All 2'-One + 3' amine arrestor for 781-30-01 | 2170 |
| invader | cca aaa gtc cag tga ttt tca cca ggc aag a | 685-18-01 | | | 2171 |

Secondary Cassettes

| | | | | | |
|------------|---|-----------|--------|--|------|
| SRT | cgaggagcagctggcgctctcattgaatcct-NH2 | 277-68-05 | FV-1 | | 2172 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2173 |
| SRT | ccaggagcagctggcgctctcattgaatcct | 685-23-01 | FV-2 | | 2174 |
| FRET probe | Fcaac(Z21)gctctctcg | 787-29-02 | | | 2175 |
| SRT | cggaagacagctggcgctctcattgaatcct-NH2 | 641-60-03 | MO4-1 | | 2176 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2177 |
| SRT | cggaagacagctggcgctctcattgaatcct-NH2 | 562-63-01 | MO4-2 | | 2178 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2179 |
| SRT | ccaggagcagctggcgctctcattgaatcct | 685-23-02 | MO4-3 | | 2180 |
| FRET probe | Fcaac(Z21)gctctctcg | 787-29-02 | | | 2181 |
| SRT | cgaggagcagctggcgctctcattgaatcct-NH2 | 562-92-01 | TT-1 | | 2182 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2183 |
| SRT | cggaagacagctggcgctctcattgaatcct-NH2 | 685-66-01 | TT-2 | | 2184 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2185 |
| SRT | gctactgagatgaagagagcgtgaatcct-NH2 | 491-68-02 | MO2 | | 2186 |
| FRET probe | Fcttc(Cy3)tcagtcgc | 491-68-01 | | | 2187 |
| SRT | cag agg aag cgg ttg cgt acg act ggt taa-NH2 | 458-35-03 | MISC-1 | | 2188 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2189 |
| SRT | cag agg aag cgg ttg cgt cgg gtt gtt aa-PO3 | 441-31-02 | MISC-2 | | 2190 |
| FRET probe | Fcaac(Cy3)gctctctcg | 187-46-01 | | | 2191 |



Oligo sequence descriptions: 5' to 3' direction, 2-Ome nts are bolded and underlined, internal modifications defined in ()

FRET Oligo/SRT Combinations

| Set | FRET Oligo | SRT |
|--------|------------|-------------|
| Set 1 | 187-46-01 | 641-60-02 |
| Set 2 | 187-46-01 | 690-82-03 |
| Set 3 | 307-70-02 | 339-50-03 |
| Set 4 | 303-18-05 | 343-63-07 |
| Set 5 | 303-18-05 | 343-25-01 |
| Set 6 | 187-46-01 | 649-10-01 |
| Set 7 | 744-80-03 | 277-068-05N |
| Set 8 | 187-46-01 | 833-18-07 |
| Set 9 | 767-28-03 | 777-71-10 |
| Set 10 | 767-29-02 | 996-29-01 |
| Set 11 | 1067-20-01 | 996-29-01 |
| Set 12 | 307-70-02 | 307-70-04 |
| Set 13 | 491-01-01 | 491-02-04 |
| Set 14 | 187-46-01 | 562-84-01 |

FRET Oligos

| Oligo # | Oligo Sequence |
|------------|-----------------------------|
| 187-46-01 | Fam-CAAC(CY3)GCTTCTCTCCG |
| 307-70-02 | Fam-ATT(CY3)TCTCAGAC-NH2 |
| 303-18-05 | Fam-TAAC(CY3)GCTTCTCTCCG |
| 744-80-03 | Fam-CAAT(Dabey)TGTCTCTCTCCG |
| 767-28-03 | Red Dye-CTC(Z-21)TCTCAGTCCG |
| 767-29-02 | Fam-CAC(Z-21)TGTCTCTCTGG |
| 1067-20-01 | Fam-CAC(Z-28)TGTCTCTCTGG |
| 491-01-01 | Fam-CTTC(CY3)TCTCAGAC |

| SEQ ID NO |
|-----------|
| 2192 |
| 2193 |
| 2194 |
| 2195 |
| 2196 |
| 2197 |
| 2198 |
| 2199 |

SRT

| Oligo # | Oligo Sequence |
|-------------|-----------------------------------|
| 641-60-02 | CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2 |
| 690-82-03 | CGGAGGAAGCAGTTGGCGGTGACGGTT |
| 339-50-03 | CAGTCTGAGATGAATGAGACGAGAGT-NH2 |
| 343-63-07 | CGGAGGAAGCGGTTAGTCTGTCACGTCAT-NH2 |
| 343-25-01 | CGGAGGAAGCGGTTAGTCTGCCACGTCAT-NH2 |
| 649-10-01 | CGGAGGAAGCAGTTGGTGGCGCTCGTAA-NH2 |
| 277-068-05N | CGGAGGAAGCAGTTGGTGGCGCTCGTAA-NH2 |
| 833-18-07 | CGGAGGAAGCAGTTGGCGCGGTGCGGCT-NH2 |
| 777-71-10 | CCGAGTGAAGTGAAGGCGTGACGGU-NH2 |
| 996-29-01 | CCGAGTGAAGTGAAGGCGTGACGGU-NH2 |
| 307-70-04 | CAGTCTGAGATGAATGATACGCGG-NH2 |
| 491-02-04 | AGTCTGAGATGAAGGAGCGTGCTGG-NH2 |
| 562-84-01 | CGGAGGAAGCGGTTGGTGAATCTCGGG-NH2 |

| SEQ ID NO |
|-----------|
| 2200 |
| 2201 |
| 2202 |
| 2203 |
| 2204 |
| 2205 |
| 2206 |
| 2207 |
| 2208 |
| 2209 |
| 2210 |
| 2211 |
| 2212 |

| Oligo Type | Oligo # | Oligo Sequence | Notes | Position | SEQ ID NO |
|---------------|------------|------------------------------------|-----------------|-------------------|-----------|
| Human IL-2 | 196-55-01 | TCTGTGCGGTATCTCTCTGGGCATGTAA | | | 2213 |
| Probe | 196-55-02 | GTGGCGTATCTCTCTGGGCATGTAA | | Splice Junction 2 | 2214 |
| Probe | 196-55-03 | CGGTATCTCTCTCTGGGCATGTAA | | | 2215 |
| Invader | 128-93-02 | GAAGATGTTTCAGTCTGTGGG(dC) | ddC = dideoxy C | | 2216 |
| Capture Oligo | 145-030-05 | AAAGATACGACACAGAACACG(BIOTIN-5A)TT | | | 2217 |
| Probe | 315-28-01 | TGGGTATCTTAATTCATTCAAAAT | | Splice Junction 1 | 2218 |
| Invader | 315-28-02 | TGGGAGTTTGGGATCTCTGTAAATTAA | | | 2219 |



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| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2220 |
| Probe | 315-29-01 | TGGCGTATCTAAATTATTAATTCATTC | 2221 |
| Invader | 315-29-02 | ATCTGGTGAGTTTGGGATCTTGA | 2222 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2223 |
| Probe | 315-29-03 | TGGCGTATCTTCCATTCAAAATCATC | 2224 |
| Invader | 315-29-04 | GTTTGGGATCTTGTAAATTATAAA | 2225 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2226 |
| Probe | 315-30-01 | GTGGCGTATCTTCTTGGGCAT | 2227 |
| Invader | 315-30-02 | GAAGATGTTTCAGTTCTGTGGC | 2228 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2229 |
| Human b-actin | | | |
| Probe | 315-26-01 | TGGCGTATCTCTGGGTCATCTTC | 2230 |
| Invader | 315-26-02 | GGGTGTTGAAGGTCCTCAACATGAA | 2231 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2232 |
| Probe | 315-27-01 | TGGCGTATCTCTTGATCTTCATTGT | 2233 |
| Invader | 315-27-02 | ACTTGGCTCAGGAGGAGCAATGAA | 2234 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2235 |
| Probe | 315-91-01 | TGGCGTATCTGATCTGGGTCATCT | 2236 |
| Invader | 315-91-02 | TGGCTGGGGTGTGAAGGTCTCAACAA | 2237 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2238 |
| Probe | 315-92-01 | ACCCGTATCTGCCAGGAGGGA | 2239 |
| Invader | 315-92-02 | AGTTTCGTGGATGCCACAGGAGACCAA | 2240 |
| Invader | 315-92-03 | AGTTTCGTGGATGCTACAGGAGACCAA | 2241 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2242 |
| Probe | 340-32-01 | TGGCGTATCTCTCAACATGATCT | 2243 |
| Invader | 340-32-02 | ACGTACATGGCTGGGGTGTGAAGGA | 2244 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2245 |
| Probe | 340-33-01 | TGGCGTATCTGATCTGGGTCATC | 2246 |
| Invader | 340-33-02 | TGGCTGGGGTGTGAAGGTCTCAACAA | 2247 |
| Capture Oligo | 195-023-01 | AAAAGATACGCCACAGC(BIOTIN-dTTC | 2248 |
| Probe | 740-01-01 | CCGTACGCCCTCGCCTTGGGGTTC | 2249 |
| Invader | 740-01-02 | TCTGGGTCTCTTCTCGCGGTTGA | 2250 |
| Arrestor | 740-01-03 | GAACCCCAAGGCGAGGCGGT | 2251 |
| Secondary Cassette | | Set 1 | |
| Probe | 740-01-08 | CCGTACGCCCTCGGTCATCTTCT | 2252 |
| Stacker | 740-01-04 | CGCGTGGCGCTTGGGGT | 2253 |
| Invader | 740-01-06 | CTGGGGTGTGAAGGTCTCAACATGATCC | 2254 |
| Arrestor | 740-01-09 | AGAGATGACCCATGGGCG | 2255 |
| Secondary Cassette | | Set 2 | |
| Mouse GAPDH | | | |
| Probe | 425-59-01 | FlCTCTCTCGTCTCTCTCGGAAGA | 2256 |
| Invader | 425-59-02 | ATTGTGATGTAGTGGGGTCTCGCA | 2257 |
| Probe | 425-60-01 | FlCTCTCTCGTCTCTCTGTGACAATC | 2258 |
| Invader | 425-60-02 | GCAGTTGGTGGTGCAGATGCATA | 2259 |
| Probe | 425-61-01 | FlCTCTCTCGTCTCTACAGGAAATG | 2260 |
| Invader | 425-61-02 | GCTGTAGCCGTATTCATTGTCAA | 2261 |
| Probe | 425-80-01 | FlCTCTCTCGTCTCTCTCTCGGAAG | 2262 |
| Invader | 425-80-02 | CATTGATGTAGTGGGGTCTCGA | 2263 |
| Probe | 425-87-01 | CTCTCTCGTCTCTCTCTGGAAGA | 2264 |
| Invader | 425-87-02 | ATTGTGATGTAGTGGGGTCTCGCA | 2265 |
| Arrestor | 425-87-04 | ICITCCAGGAGAGACG | 2266 |
| Secondary Cassette | | Set 3 | |
| Probe | 425-87-02 | CTCTCTCGTCTCTCTCTGGAAG | 2267 |
| Invader | 425-80-02 | CATTGTGATGTAGTGGGGTCTCGA | 2268 |
| | | Fl = Fluorescein | |
| | | Fl = Fluorescein | |
| | | Fl = Fluorescein | |
| | | Same as 425-59-01 without Fluorescein | |
| | | Same as 425-80-01 without Fluorescein | |

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| Arrestor | 425-87-05 | CTTCCAGGAGGAGCG | | 2269 |
| Secondary Cassette | | Set 3 | | |
| Probe | 425-87-03 | CTCTCTCGTCTCTACCGAAATG | Splice Junction 8 | 2270 |
| Invader | 425-81-02 | CGTGTAGCGGTATTCATTGTCAA | | 2271 |
| Arrestor | 425-87-06 | CATTCTGGTAGAGCG | | 2272 |
| Secondary Cassette | | Set 3 | | |
| Probe | 453-23-01 | ATGACGTGACAGACCTCTCTGGAAGAT | Splice Junction 4 | 2273 |
| Probe | 453-23-03 | ATGACGTGACAGACCTCTCTGGAAGATG | | 2274 |
| Invader | 425-80-02 | CATTGTGTTAGTGGGGTCTCGA | | 2275 |
| Arrestor | 453-23-04 | CATCTCCAGGAGGTCGT-NH2 | | 2276 |
| Secondary Cassette | | Set 4 | | |
| Probe | 453-23-02 | ATGACGTGGCAGACCTCTCTGGAAGAT | Splice Junction 4 | 2277 |
| Invader | 425-80-02 | CATTGTGTTAGTGGGGTCTCGA | | 2278 |
| Arrestor | 453-23-05 | AICTCCAGGAGGTCGT-NH2 | | 2279 |
| Secondary Cassette | | Set 5 | | |
| Probe | 435-87-04 | CAGTCAGCTCTCTCAGGTTTTG | | 2280 |
| Invader | 395-05-07 | AGGCAGCTCTCAGGTCAAGTGTGA | | 2281 |
| FRET Probe - Secondary Reaction | 524-51-01 | Fl-CTTC(C)3TCTCAGTAGCG | | 2282 |
| Secondary Reaction Template | 524-51-03 | CGCTACTGAGATGAAGGAGCGTGA-NH2 | | 2283 |
| Probe | 524-51-04 | CGCTAATGAGATGAAGGAGCGTGA-NH2 | | 2284 |
| Invader | 435-87-04 | CAGTCAGCTCTCTCAGGTTTTG | | 2285 |
| Arrestor | 395-05-07 | AGGCAGCTCTCAGGTCAAGTGTGA | | 2286 |
| FRET Probe - Secondary Reaction | 524-51-02 | Fl-CTTC(C)3TCTCAGTAGCGA | | 2287 |
| Secondary Reaction Template | 524-51-05 | TGCTACTGAGATGAAGGAGCGTGA-NH2 | | 2288 |
| Secondary Reaction Template | 524-51-06 | TGCTAATGAGATGAAGGAGCGTGA-NH2 | | 2289 |
| Human Ubiquitin | | | | |
| Probe | 796-72-01 | AACGAGGGCGCACCTTACATTTTCTATCGTATCC | 119 | 2290 |
| Invader | 428-81-02 | CCCTCCCTTATCTCGGATCTTGCGA | | 2291 |
| Arrestor | 796-72-02 | GGATACGATAGAAAATGTAAGGTGCGC | | 2292 |
| Secondary Cassette | | Set 6 | | |
| Probe | 796-72-03 | AACGAGGGCGCACCTTACATTTTCTATCGTATC | | 2293 |
| Invader | 428-81-02 | CCCTCCCTTATCTCGGATCTTGCGA | | 2294 |
| Arrestor | 796-72-04 | GATAGGATAGAAAATGTAAGGTGCGC | | 2295 |
| Secondary Cassette | | Set 6 | | |
| Probe | 820-35-01 | AACGAGGGCGCACCTTACATTTTCTATCG | | 2296 |
| Probe | 820-35-02 | AACGAGGGCGCACCTTACATTTTCTATCGT | | 2297 |
| Invader | 428-81-02 | CCCTCCCTTATCTCGGATCTTGCGA | | 2298 |
| Arrestor | 820-35-03 | ACGATAGAAAATGTAAGGTGCGC | | 2299 |
| Secondary Cassette | | Set 7 | | |
| Probe | 820-88-01 | AACGAGGGCGCACCTTACATTTTCTATCGT-NH2 | Same as 820-35-02 with 3' Amine | 2300 |
| Probe | 820-88-02 | AACGAGGGCGCACCTTACATTTTCTATCGTU | Same as 820-35-02 with O-Me U for Blocking | 2301 |
| Probe | 820-88-03 | AACGAGGGCGCACCTTACATTTTCTATCGTG | Same as 820-35-02 with O-Me G for Blocking | 2302 |
| Probe | 820-88-04 | AACGAGGGCGCACCTTACATTTTCTATCGTT | Same as 820-35-02 with T for Blocking The T is a mismatch against the RNA sequence | 2303 |
| Invader | 428-81-02 | CCCTCCCTTATCTCGGATCTTGCGA | | 2304 |
| Arrestor | 820-35-03 | ACGATAGAAAATGTAAGGTGCGC | | 2305 |
| Secondary Cassette | | Set 7 | | |
| Probe | 847-65-01 | GCGGACGCGCGCTTACATTTTCTATCGT | | 2306 |
| Invader | 428-81-02 | CCCTCCCTTATCTCGGATCTTGCGA | | 2307 |
| Arrestor | 847-65-02 | ACGATAGAAAATGTAAGGTGCGC | | 2308 |
| Arrestor | 847-65-03 | ACGATAGAAAATGTAAGGTGCGC | | 2309 |
| Secondary Cassette | | Set 8 | | |
| Probe | 936-61-01 | AACGAGGGCGCACCTTACATTTTCTATCGTCCG | Same as 428-87-01 without Biotin blocking group | 2310 |
| Invader | 428-81-02 | CCCTCCCTTATCTCGGATCTTGCGA | | 2311 |

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| Arrestor
Secondary Cassette | 938-61-02 | CGGATACGATAGAAAATGTAAAGGTGGCG
Set 7 | Same as 428-87-03 without Biotin blocking group | 2312 |
| Monocyte Chemotactic Protein 1 (MCP-1) | 820-89-01 | CCGTCACGCTCCTTCGGAGTTTGGG | | 2313 |
| Probe | 685-76-01 | GGGTTGTGGAGTGTAGTGTCAAGTA | | 2314 |
| Arrestor | 820-89-02 | CCCAAACTCCGAAGGAGGCG
Set 9 | Same as 720-92-01 without the amine | 2315 |
| Secondary Cassette | | | | |
| MAGE-3 | 1001-01-01 | FLTTTCTGGAAGCTTTGCT | | 2316 |
| Probe | 871-18-03 | CGATGCGCAAGACGAGCTGCAAGGAAG | Same analyte specific Region as 871-18-02 | 2317 |
| Invader | 871-18-01 | GAAGATCACAGGAAGAAATAC | | 2318 |
| Stacker | 1138-50-01 | GCAGCTTCITGGGA | | 2319 |
| Stacker | 1138-50-02 | AACGAGGCGCACGTTGGGTGA | | 2320 |
| Probe | 1138-50-03 | GCAGCTTCITGGGACT | | 2321 |
| Stacker | 1138-50-04 | AACGAGGCGCACGTTGGGTGAG | | 2322 |
| Probe | 1138-50-05 | CTCCAGGTAGTTTCTGTCACGAAATC | | 2323 |
| Invader | 1138-50-06 | CTCACCCCAACGTCGCG
Set 10 | | 2324 |
| Arrestor | | | | |
| Secondary Cassette | | | | |
| Stacker | 1138-51-01 | AGCTTCITGGGATC | | 2325 |
| Probe | 1138-51-02 | AACGAGGCGCACGTTGGGTGAGC | | 2326 |
| Stacker | 1138-51-03 | GCCTTCITGGGATC | | 2327 |
| Probe | 1138-51-04 | AACGAGGCGCACGTTGGGTGAGCA | | 2328 |
| Invader | 1138-51-05 | CAGGTAGTTTCTGTCGACGAAATGA | | 2329 |
| Arrestor | 1138-51-06 | TGCTCACCCCAAGTCGCG
Set 11 | | 2330 |
| Secondary Cassette | | | | |
| Stacker | 1138-67-01 | TGCGAGGATCAGTCGC | | 2331 |
| Probe | 1138-67-02 | AACGAGGCGCACCCCAATTCATAACA | | 2332 |
| Invader | 1138-67-03 | GGCCCTTGAGACCCCA | | 2333 |
| Arrestor | 1138-67-04 | TGTTATGAATTTGGTGGTGCGC
Set 11 | | 2334 |
| Secondary Cassette | | | | |
| Stacker | 1138-67-05 | CAIGCAGGATCAGTCGC | | 2335 |
| Probe | 1138-67-06 | AACGAGGCGCACCCCAATTCATAA | | 2336 |
| Invader | 1138-67-07 | AGGGCCCTTGAGACCA
Set 11 | | 2337 |
| Arrestor | 1138-67-08 | TTATGAATTTGGTGGTGCGC
Set 11 | | 2338 |
| Secondary Cassette | | | | |
| Human Oncostatin M | 335-30-02 | CCTGGCGTATCTAGGGCTCCA | | 2339 |
| Probe | 264-42-03 | GTGTTACAGGTTTGGAGGCGGATAA | | 2340 |
| Invader | 374-32-01 | CTGGAGCCCTAGATAC-NH2 | | 2341 |
| Arrestor | 374-32-02 | CTGGAGCCCTAGATACG-NH2 | | 2342 |
| Arrestor | 374-32-03 | CTGGAGCCCTAGATACG-NH2
Set 12 | | 2343 |
| Secondary Cassette | | | | |
| Probe | 524-39-01 | CAGTCAAGCTCTCTTACAGTTTGTG-NH2 | | 2344 |
| Invader | 395-05-07 | AGGCAGCTCTCAGGTCAGGTGTGA | | 2345 |
| Stacker | 435-40-02 | GAGGCGGATAGGGCTCCA | | 2346 |
| Arrestor | 369-47-07 | CAAAACCTTGAAGAGACG-NH2
Set 13 | Same as 435-67-04 with 3' Amine | 2347 |
| Secondary Cassette | | | | |
| Probe | 1088-74-01 | AACGAGGCGCACCCCTCTGTGTG | | 2348 |
| Arrestor | 1088-74-02 | CACACAGAGGTCGCGC | | 2349 |
| Probe | 1088-74-03 | AACGAGGCGCACCCCTCTGTGTG-NH2 | | 2350 |
| Probe | 1088-74-04 | AACGAGGCGCACCCCTCTGTGTG-HEX | HEX = Hexanediol | 2351 |
| Invader | 603-75-03 | GCAAGGACACAGACTGAGAGCGTA | | 2352 |



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| Stacker | 752-01-05 | AGCAGTACCCCAIG | 2353 |
| Arrestor | 541-02-04 | CACACAGAGGAGCGC-NH2 | 2354 |
| Secondary Cassette | | Set 10 | |
| Probe | 1138-49-02 | AACGAGGCGCACCTTCTGGAG-NH2 | 2355 |
| Stacker | 1138-49-01 | CTGGGCAAGGAG | 2356 |
| Invader | 1138-49-03 | GTCTGTGCATGAGATCTGTCTGA | 2357 |
| Arrestor | 1138-49-04 | CTCCAGAGGTCGCG | 2358 |
| Secondary Cassette | | Set 11 | |
| Probe | 1138-49-06 | AACGAGGCGCACTCTGCTTCT-NH2 | 2359 |
| Stacker | 1138-49-05 | GGAGCTGGCCAA | 2360 |
| Invader | 1138-49-07 | TGGTGTCTGCATGAGATCTGA | 2361 |
| Arrestor | 1138-49-08 | TCAGAGGAGAGTGGC | 2362 |
| Secondary Cassette | | Set 11 | |
| Probe | 1138-49-10 | AACGAGGCGCACCATGAGATCT-NH2 | 2363 |
| Stacker | 1138-49-09 | GTCTGTCTTCTGA | 2364 |
| Invader | 1138-49-11 | GAGTGTCTGTGTCTCCCTGA | 2365 |
| Arrestor | 1138-49-12 | AGATCTCATGTGTGGC | 2366 |
| Secondary Cassette | | Set 11 | |
| Stacker | 1163-01-01 | IGGCCAAGGAGCA | 2367 |
| Probe | 1163-01-02 | AACGAGGCGCACTCTGGAGC-NH2 | 2368 |
| Invader | 1163-01-03 | TCTGTGCATGAGATCTGTCTGCA | 2369 |
| Arrestor | 1163-01-04 | GTCCAGAGAGTGGC | 2370 |
| Secondary Cassette | | Set 11 | |
| Stacker | 1163-01-05 | GGCCAAGGAGCAC | 2371 |
| Probe | 1163-01-06 | AACGAGGCGCACTCTGGAGCT-NH2 | 2372 |
| Invader | 1163-01-07 | CCTGCATGAGATCTGTCTGCTA | 2373 |
| Arrestor | 1163-01-08 | AGCTCCAGAGTGGC | 2374 |
| Secondary Cassette | | Set 11 | |
| Stacker | 1163-01-09 | GGCAAGGAGCACG | 2375 |
| Probe | 1163-01-10 | AACGAGGCGCACTCTGGAGCTC-NH2 | 2376 |
| Invader | 1163-01-11 | CCTGCATGAGATCTGTCTGCTA | 2377 |
| Arrestor | 1163-01-12 | GAGCTCCAGTGGC | 2378 |
| Secondary Cassette | | Set 11 | |
| 84h6r | | | |
| Probe | 688-51-01 | CGCCGAGATCAAGCAAGAGGTCT | 2379 |
| Invader | 688-51-02 | AGCCCTTGAGTTTAATAACTTCATAGGCACTA | 2380 |
| Arrestor | 688-51-03 | AGACCGTCGTGGCGTGAIC | 2381 |
| Secondary Cassette | | Set 14 | |
| Probe | 688-51-04 | CGCCGAGATCACTCAACACATAAAAGCCA | 2382 |
| Invader | 688-51-05 | CGGAGAGCTGAGGAATACGTCAACCA | 2383 |
| Arrestor | 688-51-06 | TGGCTTTATGGTGTGAGGTGAIC | 2384 |
| Secondary Cassette | | Set 14 | |
| MSH2 | | | |
| Probe | 690-32-02 | CGTCAAGCTCCGAACTGCCCTAG | 2385 |
| Invader | 690-32-04 | GTATAAGTCCGAGCATCAAGAGGC | 2386 |
| Stacker | 709-52-01 | GGTCTTGGGYAGGG | 2387 |
| Arrestor | 690-32-05 | GAGGAGGCTTGAGGGAIC | 2388 |
| Secondary Cassette | | Set 1 | |

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SEQ ID NO

ELISA Format Kits
Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)
G4731 Probe Set

p 5'-CTCTCTCGTCTCCAGGGCGTCGTCGG-PO4-3'
l 5'-CTGTACACACGTCGGTGTGA-3'
c 5'-AAAAAGGAGACGAGAGAGTG-3'

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for the remainder of the oligo sets on this list, the *fret*/target secondary sets are one of the following 11:

| FRET/TARGET SETS | |
|------------------|-----------|
| FRET | TARGET |
| set 1 307-70-03 | 502-93-01 |
| set 2 307-70-03 | 502-93-02 |
| set 3 187-46-01 | 641-60-02 |
| set 4 187-46-01 | 277-68-05 |
| set 5 187-46-01 | 685-56-01 |
| set 6 187-46-01 | 641-60-03 |
| set 7 187-46-01 | 649-10-01 |
| set 8 680-17-02 | 782-70-02 |
| set 9 187-46-01 | 277-68-06 |
| set 10 187-46-01 | 491-02-02 |
| set 11 307-70-03 | 761-40-02 |

FRETS

307-70-03
187-46-01
680-17-02

5'-Fam-ATTC(CY3)TCTCAGACT-NH2-3'
5'-Fam-CAAC (CY3)GCTTCCTCCG-3'
5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

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TARGETS

502-93-01
502-93-02
641-60-02
277-68-05
685-56-01
641-60-03
649-10-01
782-70-02
277-68-06
491-02-02

5'-CAGTCTGAGATGAATGATACGAGAGT-NH2-3'
5'-CAGTCTGAGATGAATGAGACGAGAGT-NH2-3'
5'-CGGAGGAAGCAGTTGGAGCGTGACGGT-NH2-3'
5'-CGGAGGAAGCAGTTGGTGGCCCTCGTTAA-PO4-3'
5'-CGGAGGAAGCAGTTGGTGGTGGCCCTCGGCGG-NH2-3'
5'-CGGAGGAAGCAGTTGGTGGCCCTCGTAA-NH2-3'
5'-CGGAGGAAGCAGTTGGTGGCCCTCGTTAA-NH2-3'
5'-GCGAGAGAGACAGCGCAACCTGCCGTC-3'
5'-CGGAGGAAGCAGTTGTCGCGAAGATG-3'
5'-CGGAGGAAGCAGTTGGAGACGTGACTGTGG-NH2-3'

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761-40-02

Cell Lysate Kits

adipocyte lipid binding protein, mouse (m-aP2)

C289 Probe Set

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G392 Probe Set

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rev-ErbA, mouse (m-revErbA)

C155 Probe Set

p

i

Carnitine palmitoyltransferase, mouse (m-CPT-1)

T352 Probe Set

p

i

C851 Probe Set

p

i

Carnitine palmitoyltransferase, human (h-CPT-1)

5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'

FRET/TARGET SET 1

5'-CCGCCATCTAGGGTTATGATGCTA-3'

5'-CTCTCTCGTCTCCTTCACTTCTCTGTCG-NH2-3'

3'-PO4-AGCAGAGGAAGTGGAAAGGACAGC-5'

3'-NH2-AGCAGAGGAAGTGGAAAGGACAGC-5'

3'-PO4-AGAGCAGAGGAAGTGGAAAGGACAGC-5'

5'-AACGAGGGCAGCTTCACTTCTCTGTCG-NH2-3'

5'-AACGAGGGCAGCTTCACTTCTCTGTCG-Biotin-3'

3'-PO4-CCGCGTGGAAAGTGGAAAGGACAGC-5'

3'-PO4-CTCCGCGTGGAAAGTGGAAAGGACAGC-5'

5'-CATCTTCGGGACCTTCACTTCTCTGTCG-NH2

3'-PO4-GCCTGAAGTGGAAAGGACAGC-5'

3'-PO4-GCGCCTGAAGTGGAAAGGACAGC-5'

5'-CTTGCTCCCGTGTCTCACTTCTCTGTCG-NH2

5'-CTTGCTCCCGTGTCTCACTTCTCTGTCG-Biotin

3'-PO4-GGGCACGAAAGTGGAAAGGACAGC-5'

3'-PO4-AGGGGCACGAAAGTGGAAAGGACAGC-5'

FRET/TARGET SET 1

5'-CTCTCTCGTCTCCTCACTTCCACCACAG-NH2-3'

5'-TTGTGTAAGTCACGCCCTTTCATAAT-3'

FRET/TARGET SET 4

5'-AACGAGGGCAGCAGAGGTAATGAATCT-NH2-3'

5'-CCACTCCTGAAGGCTCCGCAGTC-3'

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAATGCCCTGTCGCC-NH2-3'

5'-GCTTCAGGGTTTGTGGGAAGAAGAAC-3'

FRET/TARGET SET 2

5'-CTCTCTCGTCTCGTTTGGGGGATACAT-NH2-3'

5'-CGGCTTGATCTCTTCAACGGTCCAC-3'

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U744 Probe set

p 5'-CTCTCTCGTCTCAATCAATACCACCTGTAATCT-NH2-3' 2430
i 5'-CTCACGTAATTTGTAGCCCAACGAGGTTTC-3' 2431
a 3'-NH2-GCAGAGTTGAAGTTTATGGTGACATTAGA-5' 2432
s 5'-TGGTCCAAAGACCGACAGCAAAATCTTGAG-3' 2433

A456 Probe Set

p 5'-CAGTCACGTCTCTTCAGGGAGTAGCGCA-NH2-3' 2434
i 5'-CCCGTGGTAGGAGAGCAGCACTA-3' 2435
a 3'-NH2-GCAGAGAAGTCCTCATCGCGT-5' 2436

C759 Probe Set

p 5'-CTCTCTCGTCTCGCCACCGAGGATT-NH2 2437
i 5'-CTCCCAACAGTCGCTCACGTAATTTGTAA-3' 2438
a 5'-AATCCTGGTGGCGGAGACG-B-3' 2439
s 5'-TTAACTTCAAATACCACCTGTAATCTTGGTCCAAGACCG-3' 2440

G329 Probe Set

p 5'-ACCGAGGGCGACCAATATTCTCTAACG-b-3' 2441
i 5'-GCCGTTTCAGAGTCGATGATTTTGA-3' 2442
a 3'-(biotin)-GCGGTGGTTAATAAGGATTGC-5' 2443

C1763 Probe Set

p 5'-CATCTTCGGGAGACATTTCTTGATGATTCCTT-3' 2444
i 5'-AAAGGTGTCTGGGCTCGTGCT-3' 2445
a 3'-(biotin)-GCCCTCTGTAAAGAACTACTAAGGAA-5' 2446

Phosphatidylinositol-3-phosphate p110 α , human (h-PI3Kp110 α)
G1045 Probe Set (FV Arm)

p 5'-AACGAGGGCGACCATTTCTCTCTGTG-NH2-3' 2447
i 5'-GACCAAGCCCTGACATGAACTTTAC-3' 2448
a 3'-NH2-CGCGTGGTCAAAAGGAGACAC-5' 2449

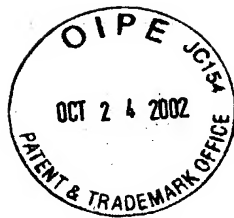
C1521 Probe Set

p 5'-CTCTCTCGTCTCGGGAGGGTAATAAAGG-NH2-3' 2450
i 5'-GCTGCCCTTCAATAATCTTATCGAAC-3' 2451
a 3'-NH2-AGCAGAGCCCTCCCATTTATTCC-5' 2452

C2667 Probe Set

p 5'-CTCTCTCGTCTCGTTGTATTCTTTAAGCCAG-NH2-3' 2453
i 5'-CGGTCCAGGTCATCCCGAGAC-3' 2454

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2455

3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'

G537 Probe Set

a

FRET/TARGET SET 2

5'-CTCTCTCGTCTCCTCTCGTGGTGATATGTTTG-NH2-3'

p

5'-CTAAGTTTTTCAGGGATGGATGGTTTCATGC-3'

i

3'NH2-AGCAGAGGAGACCCACCTATACAAAC-5'

a

T3192 Probe Set

p

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAACTGTGTGGGC-NH2-3'

i

5'-TTAAGATCTGTAGTCTTTCCGAAC-3'

a

3'NH2-AGCAGAGTTACACACCCCG-5'

Cartilage-derived morphogenic protein 1, human (h-CDMP1)

A831 Probe Set

p

FRET/TARGET SET 6

5'-CCGTACGCTCCTCTGTTGCCCTCCC-(biotin)-3'

i

5'-AGCCTCCAACTTCACGCTGT-3'

a

5'-GGGAGGCAACAGGAGGCG-(biotin)-3'

A1691 Probe Set

p

FRET/TARGET SET 5

5'-CCGCCGAGATCACTAAGAGGATGCTGATGG-(biotin)-3'

i

5'-ACACCACAGTTGTTGGCAGAGTCAAG-3'

a

5'-CCATCAGCATCCTCTTTCAGTGATCTCGG-(biotin)-3'

b-actin, rat (r-bACT)

C1671 Probe Set (longer)

p

FRET/TARGET SET 6

5'-CCGTACGCTCGCCTTAGGGTTCA-NH2-3'

i

5'-TCTGGTTCATCTTTTACGGTTGA-3'

a

3'-GCGGAGCGGAATCCCAAGT-5'

s

5'-GAGGGGCTCGGTGAGC-3'

Bile Salt port Pump, rat (r-BSEP)

p

FRET/TARGET SET 5

5'-CCGCCGAGATCACAGTTCTTGCCCTTC-(biotin)-3'

p

5'-CCGCCGAGATCACAGTTCTTGCCCTTC-NH3-3'

i

5'-TTACACACGCTTTTCCCTGGTATCTCC-3'

a

3-(biotin)-CTAGTGCTCAAGAACGGAAAG-5'

G1288 Probe Set

p

FRET/TARGET SET 2

5'-CTCTCTCGTCTCCAGAGGCCAGT-(biotin)-3'

i

5'-TTCTTCATCTAGGACAAGTGTGGAACCAATAA-3'

a

5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'

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|--|-------------------|---|------|
| A790 Probe Set | FRET/TARGET SET 6 | | |
| | p | 5'-CCGTCACGCCCTCTTTCTCCTATTCTCCT-(biotin)-3' | 2479 |
| | i | 5'-CCCCAATTCATTCTCATTATTCTCCGGAAGTAAATC-3' | 2480 |
| | a | 5'-AGGAGAAATGAGGAAAGAGGGCG-(biotin)-3' | 2481 |
| Nitric Oxide Synthase 2A, human (h-iNOS2) | | | |
| A3418 Probe Set | FRET/TARGET SET 6 | | |
| | p | 5'-CCGTCACGCCCTCTGTCTTTCTTCGCG-(biotin)-3' | 2482 |
| | i | 5'-GCTGCACCCGCCACCC-3' | 2483 |
| | a | 5'-GCGAAGAAAGACAGAGGGCG-(biotin)-3' | 2484 |
| Neutral Carboxy Ester Hydrolase, human (h-NCEH) | | | |
| A1221 Probe Set | FRET/TARGET SET 7 | | |
| | p | 5'-AAGGAGGGCGACTCTCTTATTCTCCTG-B-3' | 2485 |
| | p | 5'-AACGAGGGCGACTCTCTTATTCTCCTG-NH2-3' | 2486 |
| | i | 5'-GTCTCAAAGTCCACCACAGTCTC-3' | 2487 |
| | s | 5'-CAGGAGAAATAAGAGAGTGCGCG-(biotin)-3' | 2488 |
| A1221 Probe Set | FRET/TARGET SET 6 | | |
| | p | 5'-CCGTCACGCCCTCTCTTCTTATTCTCC-3' | 2489 |
| | p | 5'-CCGTCACGCCCTCTCTTATTCTCC-NH2-3' | 2490 |
| | i | 5'-GTCTCAAAGTCCACCACAGTCTC-3' | 2491 |
| | a | 3'-GCGGAGAGAGAATAAGAGG-5' | 2492 |
| | s | 5'-TGGGATGGGTCTCTGGGC-3' | 2493 |
| C1309 Probe Set | FRET/TARGET SET 8 | | |
| | p | 5'-GAACGGCAGGTTTGGCACTCTTGGCATT-NH2-3' | 2494 |
| | i | 5'-CAGGTAGGCGTAGGTCTTGA-3' | 2495 |
| | a | 3'-NH2-CGTCCAAACCGTGAGAACCGTAA-5' | 2496 |
| | s | 5'-GGCTCTGTGCTGGGCTA-NH2-3' | 2497 |
| Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR _α) | | | |
| G1480 Probe Set | FRET/TARGET SET 6 | | |
| | p | 5'-CCGTCACGCCCTCCCGACTCCGTCT-(biotin)-3' | 2498 |
| | i | 5'-CGGGTGCAGCGCAGCATT-3' | 2499 |
| | a | 5'-AGACGGAGTCGGGAGGGCG-(biotin)-3' | 2500 |
| A1044 Probe Set | FRET/TARGET SET 6 | | |
| | p | 5'-CCGTCACGCCCTCTGTCACTTGATCGTTCT-(biotin)-3' | 2501 |
| | i | 5'-TGGCCTCAATAACTCCGTATTTAGCAAG-3' | 2502 |
| | a | 5'-AGAACGATCAAGTGACAGAGGGCG-(biotin)-3' | 2503 |

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2526
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2528

5'-TGCCCATTAGTCCAAACAAGGAATCTGTA-3'
3'-GCGGAGAAATACGGAACACT-5'
5'-GAGATCTGACCATGCCATGCCATAAAGAGCC-NH2-3'

FRET/TARGET SET 7

2529
2530
2531
2532

5'-AACGAGGCGCACGCTGGCAAACTTGT-NH2-3'
5'-CCTTTCTGCTCTTTGGAGACTTGCATCA-3'
3'-NH2-CGCGTGCAGCCGTTGAACA-5'
5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3'

Hepatic Lipase, human (h-LIPC)

A830 Probe Set

2533
2534
2535
2536

5'-AACGAGGCGCACTCTAGGAAGTGGCA-NH2-3'
5'-GTGCTGGGCAATATGCTGTAGAGCG-3'
3'-NH2-CGCGTGAGATCCTTCACCGT-5'
5'-GCCAGGCTGGAAGGAGC-NH2-3'

C1154 Probe Set

2537
2538
2539

5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'
5'-CGAGTAGTGACATGGTAAAGTTGTTGTTGGCT-3'
3'-NH2-CTCTAGTGGCAGAGTCAAACCA-5'

Hepatic Lipase, rat (r-LIPC)

G357 Probe Set

2540
2541
2542
2543

5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'
5'-GGGAGATCCAGTCCCACTAATCCA-3'
3'-NH2-TCTAGTGGTGCAAGTGCCCAA-5'
5'-GGGACTGTGCGGACTTCAGG-NH2-3'

C1167 Probe Set

2544
2545
2546
2547

5'-GAACGGCAGGTTTGGGAAATTTCTTTATTCTT-NH2-3'
5'-ATTCTTCGCCCAGGGTGATG-3'
3'-NH2-GTCCAAACCCCTTAAAGAAATAAAGAA-5'
5'-CTTTTGTCCCCAGCAGTGT-NH2-3'

Metabotropic Glutamate Receptor 2, rat (r-mGluR2)

C1403 Probe Set

2548
2549
2550
2551

5'-AACGAGGCGCACGCTGGTGTGGGA-NH2-3'
5'-GCCTCATAGCATCGCAGAGGTGT-3'
3'-NH2-CGCGTGCCACCAACCCCT-5'
5'-CAGAGGCGCAGGTGCATGTTGT-NH2-3'

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G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

P
I
a
s

FRET/TARGET SET 8
5'-GAACGGCAGGTTTGTACAGACACCGC-NH2-3'
5'-GAGAGGCCAAAGTGAGACCATGTGAAAGAAA-3'
3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'
5'-CATGGATCGGCATGGCCCC-NH2-3'

2552
2553
2554
2555

kappa b alpha, human (h-MAD3)

C542 Probe Set

P
I
a

FRET/TARGET SET 7
5'-AACGAGCGCACGGGTAGGGGGG-(biotin)-3'
5'-GCCCTGCTCACAGGCAAT-3'
5'-CCCCCTACACCGTGCGC-(biotin)-3'

2556
2557
2558

C363 Probe Set

P
I
A

FRET/TARGET SET 6
5'-CCGTCACGCCCTCGTCAGTGCCCTTTTC-(biotin)-3'
5'-CACCTGGCGGATCACTTCCATGT
5'-GAAAAGGCACTGACGAGGCG-(biotin)-3'

2559
2560
2561

G953 Probe Set

P
I
A

FRET/TARGET SET 6
5'-CCGTCACGCCCTCCCTCATCTCACT-(biotin)-3'
5'-ACTCTGACTCTGTGTATAGCTCTT
5'-AGTGAGGATGAGGGAGGCG-(biotin)-3'

2562
2563
2564

C923 Probe Set

P
I
A
S

FRET/TARGET SET 7
5'-AACGAGCGCACGGTTTCTAGTGTC-NH2-3'
5'-CTCACTCTCTGGCAGCATCTGAAT-3'
3'-NH2-CGCGTGCCAAAGATCACAGT-5'
5'-GCTGCCCCAGCTGC-NH2-3'

2565
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2567
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Lecithin cholesterol acyltransferase, human (h-LCAT)

C821 Probe Set (truncated Probe Design)

P
I
a
s

FRET/TARGET SET 5
5'-CCGCGGAGATCACGGTTATGCGCTG-NH2-3'
5'-CCAGGGGGAGGTGGTC-3'
3'-NH2-TCTAGTGCCCAATACGCGAGC-5'
5'-CTCCTCTTTCAGCTTGATGCTGG-NH2-3'

2569
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C827 Probe Design

P
I
a

FRET/TARGET SET 8
5'-GAACGGCAGGTTTGGGTGGTGGTTATGCG-NH2-3'
5'-AGAGGGAAACATCCAGGGGGAG-3'
3'-NH2-CGTCCAAACCCACCACCAATACGC-5'

2573
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2575



C1217 Probe Design
p 5'-CCGCCGAGATCAGCAGATGCTGTATCCC-NH2-3' 2576
l 5'-GGTCAGGTTGCTGAAGACCATGTTG-3' 2577
a 3'-NH2-TCTAGTCTCTACGACATAGGG-5' 2578

Apolipoprotein A-1, human (h-ApoA1)
A177 Probe Set
p 5'-CCGTCACGCCTCTGAGCACATCCACG-NH2-3' 2579
l 5'-ACATAGTCTCTGCCGCTGTCTTA-3' 2580
a 3'-NH2-GCGGAGACTCGTGTAGGTGC-5' 2581
s 5'-TACACAGTGCGCAGGTCCTT-NH2-3' 2582

A227 Probe Set (titrate length of 2'-O-Me in Invader)
p 5'-GAACGGCAGGTTTGCCCAAGCGG-NH2-3' 2583
l 5'-GTCAAGGAGCTTTAGGTTTAGCTGTTA-3' 2584
i 5'-GTCAAGGATCTTTAGGTTTAGCTGTTA-3' 2585
i 5'-GTCCCAGTTGTCAAGGATCTTTAGGTTTAGCTGTTA-3' 2586
A 3'-NH2-GTCCAAACAGGTTCCGCC-5' 2587
s 5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3' 2588

G350 Probe Set
p 5'-CCGCCGAGATCACTTCTGTCTCCTT-NH2-3' 2589
l 5'-CTCCTGCCTCAGGCCG-3' 2590
a 3'-NH2-TCTAGTGGAGACAGAGAA-5' 2591
s 5'-TTCCAGGTTATCCCAGAACTCC-NH2-3' 2592

G233 Probe Set
p 5'-AGAACGGCAGTCTTCTGTTTCCCAAG-NH2-3' 2593
l 5'-CCAGTTGTCAAGGAGCTTTAGGTTTAGT-3' 2594
a 3'-NH2-CGTCAGAAAGACAAAGGGTCC-5' 2595
s 5'-CGGAGCCTTCAAACTGGGACACATAGT-NH2-3' 2596

Metabotropic Glutamate Receptor 1, rat (r-mGluR1)
T934 Probe Set
p 5'-AGAACGGCAGTCTTTAGAAATAGCGATCTGT-NH2-3' 2597
l 5'-CACTCAGGTCATGCTTGTGGCT-3' 2598
a 3'-NH2-GTCAGAACTTTATCCGCTAGACA-5' 2599
s 5'-GGGATGTCGAACAGCTGGAGAAGATTCT-NH2-3' 2600

Ubiquitin, human (h-UBI1Q)

1.1k
2.2k
3.3k
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G119 Probe Set (MO4 Arm)

p 5'-CCGTCACGCGCTCTTACATTTTCTATCGTATCCG-(biotin)-3' 2601
l 5'-CCTTCCTTATCCTGGATCTTGGCA-3' 2602
a 3'-(biotin)-GCGGAGGAAATGTAAAGATAGCATAGGC-5' 2603

G119 Probe Set

p 5'-CGCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3' 2604
l 5'-CCTTCCTTATCCTGGATCTTGGCA-3' 2605
a 3'-(biotin)-CTAGTGGAAATGTAAAGATAGCATAGGC-5' 2606

G131 Probe Set

p 5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3' 2607
l 5'-GCTGATCAGGAGGAAATCCTTCCTTATCT-3' 2608
a 3'-(biotin)-GCCTGACCTAGAACCCGG-5' 2609

Scanned G119 region (ELISA format (No Arrestors))

p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3' 2610
p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3' 2611
p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3' 2612
p 5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3' 2613
p 5'-CTCTCTCGTCTCGCCTTACATTTTCTATCG-NH2-3' 2614
l 5'-GGAATTCCTTCCTATCCTGGATCTTGA-3' 2615
l 5'-GGAATTCCTTCCTATCCTGGATCTTGGC-3' 2616
l 5'-CCTTCCTTATCCTGGATCTTGGCA-3' 2617
l 5'-TTCCCTATCCTGGATCTTGGCCA-3' 2618
l 5'-TCCTTATCCTGGATCTTGGCCTA-3' 2619

Ubiquitin, mouse (m-UBI)

G294 Probe Set
p 5'-CCGTCACGCGCTCTCTGGATGTTGTA-(biotin)-3' 2620
l 5'-CCAGGTGCAGGGTTGACTA-3' 2621
a 3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5' 2622

G294 Probe Set

p 5'-CGCCGAGATCACCCCTTCTGGATGTTGTA-(biotin)-3' 2623
l 5'-CCAGGTGCAGGGTTGACTA-3' 2624
a 3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5' 2625

G294 Probe Set

p 5'-CCGTCACGCGCTCTCTGGATGTTGTA-NH2-3' 2626
l 5'-CCAGGTGCAGGGTTGACTA-3' 2627

2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700



2628

3'-NH2-GCGGAGGGAAGACCTACAACATTA-5'

a

G294 Probe Set

p
i
a

FRET/TARGET SET 6

5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAATC-NH2-3'
5'-CCAGGTGCAGGGTTGACTA-3'
3'-NH2-GCGGAGGGAAGACCTACAACATTAG-3'

2629
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2631

T514 Probe Set

p
i
a

FRET/TARGET SET 7

5'-AACGAGGCGCACATGTTGTAATCAGAGAGGG-NH2-3'
5'-TGCAGGGTTGACTCTTTCTGGA-3'
3'-NH2-GCGGTGTACAACATTAGTCTCTCCCC-5'

2632
2633
2634

G750 Probe Set

p
i
a

FRET/TARGET SET 9

5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'
5'-GGACCAAGTGCAGGGTTGACTT-3'
3'-NH2-GCCTGGAAGACCTACAACAT-5'

2635
2636
2637

G185 Probe Set

p
i
a

FRET/TARGET SET 9

5'-CATCTTCGCGGACCTTCAAGTTCTCGATGG-NH2-3'
5'-CCCTCTTTATCCTGGATCTTGGCA-3'
3'-NH2-GCGCCTGAAGTGCAAGAGAGCTACC-5'

2638
2639
2640

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FIGURE 48

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| 2 | 5 | U |
| 3 | 5 | U |
| 4 | 2 | U |
| 5 | 1 | U |
| 6 | 2 | C |
| 7 | 7 | G |
| 8 | 7 | A |
| 9 | 1 | U |
| 10 | 1 | C |



FIGURE 49

| Secondary system | | | Oligo Sequence (5' to 3') | | SEQ ID NO: |
|-------------------------------|---|----------|--|------------|------------|
| FRET probe | | | FL-CAC-Z28-TGC TTC GTG G | | 2868 |
| Secondary Reaction Template 1 | | | CCA GGA AGC AAG TGG TGC GCC TCG tt | | 2869 |
| Secondary Reaction Template 2 | | | CCA GGA AGC AAG TGG AGG CGT GAC ggt | | 2870 |
| Secondary Reaction Template 3 | | | CCA GGA AGC AAG TGA CGC AGC GAC ggt | | 2871 |
| Assays | | | SRT # | Oligo Type | SEQ ID NO: |
| human v-FOS | 2 | Probe | CCGTCACGCCTCGTCATCAGGGAT NH2 | Invader | 2872 |
| | | Stacker | | | 2873 |
| | | Arrestor | | | 2874 |
| | | | | | 2875 |
| human v-FOS | 2 | Probe | CCGTCACGCCTCCAGCAGGTTG NH2 | Invader | 2876 |
| | | Stacker | | | 2877 |
| | | Arrestor | | | 2878 |
| | | | | | 2879 |
| human v-FOS | 2 | Probe | CCGTCACGCCTCAGAGGCGG NH2 | Invader | 2880 |
| | | Stacker | | | 2881 |
| | | Arrestor | | | 2882 |
| | | | | | 2883 |
| mouse interferon gamma | 2 | Probe | CCG TCA CGC CTC CCT TTT GCC AGT TG NH2 | Invader | 2884 |
| | | Stacker | | | 2885 |
| | | Arrestor | | | 2886 |
| | | | | | 2887 |
| mouse interferon gamma | 1 | Probe | AAC GAG GCG CAC CCTTTTGCAGTTG NH2 | Arrestor | 2888 |
| | | | | | 2889 |

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|--------------------------|---|---|---|------|
| mouse interferon gamma | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC CCT TTT GCC AGT TA NH2 | 2890 |
| | | | GCT CTG CAG GAT TTT CAT GTC ACC ATA | 2891 |
| | | | ctc cag ata tcc aag aag ag | 2892 |
| | | | gaa ctg gca aaa ggg agg cg | 2893 |
| mouse interferon gamma | 2 | Probe | CCG TCA CGC CTC CCT TTT GCC AGT TT NH2 | 2894 |
| mouse interleukin 10 | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC AGT TGT TTC CGT C NH2 | 2895 |
| | | | AGA GGT ACA AAC GAG GTT TTC CAA GGC | 2896 |
| | | | agc taa gat ccc tgg atc aga ttg aga ga | 2897 |
| | | | aac gga aac aac tga ggc g | 2898 |
| mouse interleukin 10 | 2 | Probe | CCGTCACGCCTCAGTTGTTCCGTT NH2 | 2899 |
| mouse interleukin 10 | 2 | Probe
Stacker | CCGTCACGCCTCAGTTGTTCCGTC NH2 | 2900 |
| | | | agctaagatccctgga | 2901 |
| mouse interleukin 10 | 2 | Probe | CCGTCACGCCTCAGTTGTTCCGTC NH2 | 2902 |
| mouse interleukin 1 beta | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCTCTCATCTTTGGGG NH2 | 2903 |
| | | | GGTTTGGAAAGCAGCCCTA | 2904 |
| | | | tccgtcaacttcaagaacag | 2905 |
| | | | ccccaaaagatgagaggcg | 2906 |
| mouse interleukin 1 beta | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCTCTGTCGTTGCT NH2 | 2907 |
| | | | CCCCAAGGCCACAGGTATTTA | 2908 |
| | | | tggtctctgtacaaag | 2909 |
| | | | agcaacgacagaggcg | 2910 |
| mouse interleukin 1 beta | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCTCCTTTTATTACACAG NH2 | 2911 |
| | | | GGGTGGGTGTGCCGTA | 2912 |
| | | | gacaggtagattcttcc | 2913 |
| | | | ctgtgtaatgaaaggaggcg | 2914 |
| mouse interleukin 2 | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2 | 2915 |
| | | | GAA TTG GCA CTC AAA TGT GTT GTC AGA GA | 2916 |
| | | | cag tta ctc tga tat tgc tga aat tct ca | 2917 |
| | | | gtt gta aaa cta aag ggg agg cg | 2918 |

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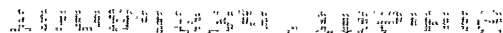
| | | | | |
|---------------------|---|---|--|------------------------------|
| mouse interleukin 2 | 1 | Probe
Stacker
Arrestor | AACGAGCGCACCCCTTTAGTTTTACA NH2
acagttacttgatattgctg
ttg taa aac taa agg cgt gcg | 2919
2920
2921 |
| mouse interleukin 2 | 2 | Probe
Stacker
Arrestor | CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2
cagttacttgatattgctg
tgt aaa act aaa ggg gag gc | 2922
2923
2924 |
| mouse interleukin 2 | 2 | Stacker | acagttacttgatattgctg | 2925 |
| mouse interleukin 4 | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC CTC CTG TGA CC NH2
ACA TCC ATC TCC GTG CAT GGC CTC CCT TA
tcg gtt caa aat gcc gat gat ctc tct ca
ggc cac agg agg agg cg | 2926
2927
2928
2929 |
| mouse interleukin 4 | 2 | Probe
Stacker | CCG TCA CGC CTC CTC CTG TGA CC NH2
tcg gtt caa aat gcc gat ga | 2930
2931 |
| mouse interleukin 4 | 2 | Probe | CCG TCA CGC CTC CTC CTG TGA CA NH2 | 2932 |
| mouse interleukin 4 | 2 | Probe
Stacker | CCG TCA CGC CTC CTC CTG TGA C NH2
ctc ggt tca aaa tgc cga tga | 2933
2934 |
| mouse interleukin 4 | 2 | Probe | CCG TCA CGC CTC CTC CTG TGA CT NH2 | 2935 |
| mouse interleukin 6 | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC TCT TTT CTC ATT T NH2
GTT CAT ACA ATC AGA ATT GCC ATT GCA CAA CA
cca cga tt ccc aga gaa c
aaa tga gaa aag aga ggc | 2936
2937
2938
2939 |
| mouse interleukin 6 | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCTCAGGGAAGGCC NH2
TCCTCTCCGGACTTGTGAAGTC
gtggtgtcaccagcat
ggccttccctgagcc | 2940
2941
2942
2943 |
| mouse interleukin 6 | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCTCAGTGGTATCCT NH2
GGTATAGACAGGTCTGTTGGGC
ctgtgaagtctctc
aggataccactgagcc | 2944
2945
2946
2947 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



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|---------------------------------|---|---|---------------------------------------|------|
| mouse SRB1 | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC GGT TCT CCA C NH2 | 2948 |
| | | | CAG GCT GGA AAT GGA GGC TGC A | 2949 |
| | | | gaa gga cac cgc gtc gtt gtc a | 2950 |
| | | | gtg gag aac oga ggc g | 2951 |
| | | | | |
| rat CX3C | 2 | Probe
Invader
Stacker
Arrestor | CCG TCA CGC CTC CTG TAC ACG AGA G NH2 | 2952 |
| | | | GGT GGT GAT GGT GAT GGC TA | 2953 |
| | | | aga gag acc ggg ata gat agc | 2954 |
| | | | ctc tcg tgt aca gga ggc | 2955 |
| | | | | |
| rat CX3CR1 | 1 | Probe
Invader
Stacker
Arrestor | AAC GAG GCG CAC CCA AGA GG NH2 | 2956 |
| | | | AGG CGT CCA GAA GAG GAA GAC AAC AAA | 2957 |
| | | | atg agc cta atg gct c | 2958 |
| | | | cct ctt ggt ggg tgc gc | 2959 |
| | | | | |
| rat CX3CR1 | 1 | Stacker | atgagcctaagtgtctggc | 2960 |
| rat Homer 1C | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACGCTTGACTACTAACA NH2 | 2961 |
| | | | GGCTGTGCACCCGCTTC | 2962 |
| | | | cattccagctcgt | 2963 |
| | | | tgtagtagtcaaggtcgc | 2964 |
| | | | | |
| rat Homer 1C | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACGTTCCATCTTC NH2 | 2965 |
| | | | CTGTGAAGGGGTACTGGTCAC | 2966 |
| | | | tcctgcactctc | 2967 |
| | | | gaagatggaacgtgcgc | 2968 |
| | | | | |
| rat Homer 1C | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCCCTCTGTT NH2 | 2969 |
| | | | TCCTGTAGTTTCTGAGTCAAAGAGTA | 2970 |
| | | | ctgaagtctctggcg | 2971 |
| | | | aacagaggggtgcgc | 2972 |
| | | | | |
| rat Homer 1C | 2 | Probe
Arrestor | CCGTACGCGCTCCCTCTCTGTT NH2 | 2973 |
| | | | gaacagagggaggcg | 2974 |
| mouse tumor necrosis factor (a) | 2 | Probe
Invader
Stacker
Arrestor | CCGTACGCGCTCAGATGATCTGAGT NH2 | 2975 |
| | | | ACAGGCTTGTCACTCGAAATTTGAGAC | 2976 |
| | | | gtgagggtctggg | 2977 |
| | | | actcagatcatctgaggcg | 2978 |
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| mouse tumor necrosis factor (a) | 1 | Probe
Arrestor | AACGAGGGCGCACTGATGATCTGAGT NH2
actcagatctctgtgcgc | 2979
2980 |
|---------------------------------|---|-------------------|--|--------------|
| mouse tumor necrosis factor (a) | 2 | Probe | CCGTCACGCCCTCTGGGAACCTTCTC NH2 | 2981 |
| | | Invader | ACTGATGAGAGGGAGGCCCATTA | 2982 |
| | | Stacker | atccctttggggac | 2983 |
| | | Arrestor | gagaagttcccagaggcg | 2984 |
| mouse tumor necrosis factor (a) | 2 | Probe | CCGTCACGCCCTCTCTGAGTAGTT NH2 | 2985 |
| | | Invader | TGTCCCAGCATCTTGTGTTTA | 2986 |
| | | Stacker | gttgaagctctgagcac | 2987 |
| | | Arrestor | aactactcaggaggcg | 2988 |
| human v-JUN | 1 | Probe | AACGAGGGCGCACCTCTGGCAAG NH2 | 2989 |
| | | Invader | GGGGCCGCAACACGGGA | 2990 |
| | | Stacker | cgggggacacccg | 2991 |
| | | Arrestor | ctttgccagagggtgcgc | 2992 |
| human v-JUN | 2 | Probe | CCGTCACGCCCTCCATGCTCTGTTT NH2 | 2993 |
| | | Invader | GGCCAGGTTCAAGGTA | 2994 |
| | | Stacker | caggatcttggggtta | 2995 |
| | | Arrestor | aaacagagcatggaggc | 2996 |
| human v-JUN | 2 | Probe | CCGTCACGCCCTCAGTTGCTGAGG NH2 | 2997 |
| | | Invader | CAGCGGCCCTGGGTTGAC | 2998 |
| | | Stacker | tttgcgtagaccgg | 2999 |
| | | Arrestor | cctcagcaactgaggc | 3000 |
| human v-JUN | 2 | Probe | CCGTCACGCCCTCCATGCTCTGTTTC NH2 | 3001 |
| | | Stacker | aggatcttggggttact | 3002 |
| | | Arrestor | gaacacagagcatggaggc | 3003 |
| human v-JUN | 2 | Probe | CCGTCACGCCCTCGTAGACCGGC NH2 | 3004 |
| | | Invader | CTGGTTGAAGTTGCTGAGGTTTGA | 3005 |
| | | Stacker | ggctgcctgtgcagg | 3006 |
| | | Arrestor | gccggtctacggaggc | 3007 |
| human v-JUN | 1 | Probe | AAC GAG GCG CAC TAA GAG CGC A NH2 | 3008 |
| | | Invader | GCCTTTGACAGGGAAGTTTCTCA | 3009 |
| | | Stacker | cgcaccgcctgg | 3010 |
| | | Arrestor | tgcgctcttagtcgc | 3011 |



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|-------------|---|---|------------------------------|------|
| human v-JUN | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACTCGGACGG NH2 | 3012 |
| | | | GTAGCCATAAGGTCCGCTCA | 3013 |
| | | | gaggaacgagggcgtga | 3014 |
| | | | ccgtccgagtgccg | 3015 |
| human v-JUN | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCCTCGGACGGG NH2 | 3016 |
| | | | GTTACTGTAGCCATAAGGTCCGCTA | 3017 |
| | | | tggttcgagcggtga | 3018 |
| | | | ccgtccgagggaggc | 3019 |
| human v-JUN | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCAAGTCCGCT NH2 | 3020 |
| | | | GATCTGGGGTTACTGTAGCCATC | 3021 |
| | | | ctcgacggaggaac | 3022 |
| | | | agcgaccttgagg | 3023 |
| human v-MYC | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCTGTCGTTGAG NH2 | 3024 |
| | | | CAGGACTTGGGCGAGCTGA | 3025 |
| | | | aggtagggaagac | 3026 |
| | | | ctaacagacaggtgcgc | 3027 |
| human v-MYC | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCCGGCAAGGG NH2 | 3028 |
| | | | TGCTATGGGCAAGTTTCGTGGATGA | 3029 |
| | | | ttcggaacgctg | 3030 |
| | | | ccctgcccggaggc | 3031 |
| human v-MYC | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCCGGGTGTTGTA NH2 | 3032 |
| | | | GAGAGTCGCGTCCTTGCTA | 3033 |
| | | | agttccagtgcaagt | 3034 |
| | | | tacaacacccggaggc | 3035 |
| human v-MYC | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCTTGCTGATGT NH2 | 3036 |
| | | | GAGGGAGGCGCTGCGTAGA | 3037 |
| | | | glggagacgtggcac | 3038 |
| | | | acatcagcacaagaggc | 3039 |
| human v-MYC | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACTCGAGGTCA NH2 | 3040 |
| | | | GGCTGCACCGAGTCGTAGA | 3041 |
| | | | tagttccgtgttggaag | 3042 |
| | | | tgacctcgagtgccg | 3043 |

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Secondary system: Oligo Sequence (5' to 3')
FRET probe RR-CTC-Z28-TTC TCA GTG CG
Secondary Reaction Template CGC AGT GAG AAT GAG GTG ATC TCG GCg gt

SEQ ID NO:
3056
3057

Analyte Human GAPDH
Oligo Type
Probe
Invader
Arrestor
Oligo Sequence (5' to 3')
5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'
5'-gga atc ata ttG GAA CAT GTA AAC CAT C-3'
5'-ctt cat tga cct caa cta cgt gat ct-3'

SEQ ID NO:
3058
3059
3060

Mouse/Rat GAPDH
Probe
Invader
Invader
Arrestor
5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'
aga atc ata ctG GAA CAT GTA GAC CAT C
gga gtc ata ctG GAA CAT GTA GAC CAT C
5'-ctt cat tga cct caa cta cgt gat ct-3'

3058
3061
3062
3060

mFabp4
Probe
Invader
Stacker
Arrestor
Probe
Invader
Stacker
CCGCCGAGATCACCCATCCCACCT NH2
CATCTCGTTTTCTCTCTTTATTGGTGGACTTTTA
tcgcacctgcacc
gtgggatgggtgac
CCGCCGAGATCACCCATCCCACCT NH2
cgttttctTTTATTGGTGGTGGACTTTTA
ttctgcacctgcac

3063
3064
3065
3066
3067
3068
3069

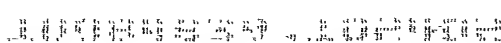
mFabp4
Probe
Invader
Stacker
Arrestor
CCGCCGAGATCACCTTCTGCACC NH2
CTTTATTGGTGGTGGACTTTCCATCCCAA
tgcaccagggoc
ggtcagaagggtgac

3070
3071
3072
3073



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|--------|----------|---------------------------------|------|
| mFabp4 | Probe | CCGCCGAGATCACCAAGGC NH2 | 3074 |
| | Invader | CCATCCACATTCTGCACCTGA | 3075 |
| | Stacker | ccgccatctagg | 3076 |
| | Arrestor | ccctggtggtgac | 3077 |
| mFabp4 | Probe | CCGCCGAGATCACCGAATTCCACG NH2 | 3078 |
| | Invader | TCCTGTCGTCTGCGGTGATTCATA | 3079 |
| | Stacker | cccagttgaaggaaatct | 3080 |
| | Arrestor | cgtggaattcgggtgac | 3081 |
| mFabp4 | Probe | CCGCCGAGATCACCGAATTCCACGC NH2 | 3082 |
| | Arrestor | ccagttgaaggaaatctcg | 3083 |
| mFabp4 | Probe | CCGCCGAGATCACCATCGAATTCCACG NH2 | 3084 |
| | Invader | CTTCCTGTCGTCTGCGGTGATTTA | 3085 |
| | Stacker | cccagttgaaggaaatct | 3086 |
| | Arrestor | gtggaattcgatggtgac | 3087 |
| rRPS29 | Probe | CCGCCGAGATCACCCGAACTTCCGCG-NH2 | 3088 |
| | Invader | GCAAGAGCGAGAACCCCTGGA | 3089 |
| | Arrestor | cgcggaagtctgggtgac | 3090 |
| rRPS29 | Probe | CCGCCGAGATCACGCAAGAGCGAGAAC-NH2 | 3091 |
| | Invader | GGCGGTTAGAGCAGACGCGC | 3092 |
| | Arrestor | ggttctgcctctgctgac | 3093 |
| rRPS29 | Probe | CCGCCGAGATCACGCGCTATGTCCTTC-NH2 | 3094 |
| | Invader | TCAGGTCGCTTAGTCCAACCTTAATGAAC | 3095 |
| | Arrestor | gaaggacataggcgtgac | 3096 |

3074 3075 3076 3077 3078 3079 3080 3081 3082 3083 3084 3085 3086 3087 3088 3089 3090 3091 3092 3093 3094 3095 3096



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|------------|----------|--|------|
| rRPS29 | Probe | CCGCCGAGATCACGTCGCTTAGTCC-NH2 | 3097 |
| | Invader | GGTAGACAGTCGAATCATCCATTACAGC | 3098 |
| | Arrestor | ggactaagcgacgtgac | 3099 |
| rat RPS29 | Probe | 5'-CCGCCGAGATCACGCCCTATGTCTT NH2-3' | 3100 |
| | Invader | 5'-AGGTCGCTTAGTCCAACTTAATGAAC-3' | 3101 |
| | Stacker | 5'-cgcgctactgacggaagcactgtc-3' | 3102 |
| | Arrestor | 5'-aaggacataggcgtgac-3' | 3103 |
| human RPL5 | Probe | 5'-CCGCCGAGATCACGCTTCCGATGTACT NH2-3' | 3104 |
| | Invader | 5'-GCATGTAATCTGCAACATTCGGCCCATGATGA-3' | 3105 |
| | Stacker | 5'-TCTGCATTAAATTCCTTGCTTTCAGAATCATACCAGGG-3' | 3106 |
| | Arrestor | 5'-agtcacatcggaagcgtgac-3' | 3107 |
| human RPL5 | Probe | 5'-CCGCCGAGATCACGCTTCCGA NH2-3' | 3108 |
| | Invader | 5'-GCAACATTCGGCCCATGATGT-3' | 3109 |
| | Stacker | 5'-tgtactctgcattaaattct-3' | 3110 |
| | Arrestor | 5'-tcggaagcgtgac-3' | 3111 |
| hACT | Probe | CCGCCGAGATCACTGGGTCATCTTCT-NH2 | 3112 |
| | Invader | GGGTGTTGAAGGTCTCAAACATGATCA | 3113 |
| | Arrestor | agaagatgacccagtgac | 3114 |
| hACT | Probe | CCGCCGAGATCACAGCAGCCGTGG-NH2 | 3115 |
| | Invader | CCAGGGAGGAGCTGGAC | 3116 |
| | Arrestor | ccacggdctgtgac | 3117 |
| r/m ACT | Probe | CCGCCGAGATCACTGGGTCATCTTTT-NH2 | 3118 |
| | Invader | GGGTGTTGAAGGTCTCAAACATGATCA | 3119 |
| | Arrestor | aaaagatgacccagtgac | 3120 |



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| hPGK | Probe
Invader
Stacker
Arrestor | CCGCCGAGATACCCCATCCA-NH2
CTTTCAGGACCACAGTCCAAGA
gccagcaggtatgc
tggatggggtgac | 3141
3142
3143
3144 |
| hRPL19 | Probe
Invader
Stacker
Arrestor | CCGCCGAGATCACCTTCCTTG-NH2
CTCTTCACGGCGCTTGCGTGA
tcttagacctgcgagcc
ccaaggaaggtgac | 3145
3146
3147
3148 |
| r/m RPL19 | Invader
Stacker | CTCCCGGCGCTTTCGTGA
tcttagacctgcgagcc | 3149
3150 |
| hRPL19 | Probe
Invader
Stacker
Arrestor | CCGCCGAGATCACTGCTTCCTTG-NH2
GCTCTTCACGGCGCTTGCGA
gtcttagacctgcgagcc
caaggaagcagtgac | 3151
3152
3153
3154 |
| r/m RPL19 | Invader | CCTCCCGGCGCTTTCGA | 3155 |

3141 3142 3143 3144 3145 3146 3147 3148 3149 3150 3151 3152 3153 3154 3155



| Analyte | Oligo Type | Oligo Sequence (5' to 3') | SEQ ID NO: |
|-----------------|-------------------------------|---|------------|
| Human GAPDH | Probe | CGCCGAGATCAGCATGATCTTGAGGCT-NH ₂ | 182 |
| | Invader | TGGTGCAGGAGGCATTGCTC | 183 |
| | Arrestor | agcccaagatcatgtagct | 3156 |
| | FRET probe | Cy5-CTC-(Z28)-TTCTCAGTGCG | 3157 |
| | SRT | CGC AGT GAG AAT GAG GTG ATC TCG GCg gt | 173 |
| | FRET probe | Cy5-CAC-(Z28)-TGCTTCGTGG | 3158 |
| | SRT | CCAGGAAGCAAGTGGTGATCTCGGGcgt | 3159 |
| | Probe | CGCCGAGATCACCTTTACATTTTCTATCGT-NH ₂ | 169 |
| | Invader | CCTTCCTTATCCTGGATCTTGGCA | 170 |
| | Arrestor | acgatagaaaaigtaaagtgatc | 171 |
| Human Ubiquitin | FRET probe (Epoch yellow dye) | Z38-CTC-(Z28)-TTCTCAGTGCG | 3160 |
| | FRET probe (Epoch yellow dye) | 550-CTC-(Z28)-TTCTCAGTGCG | 3161 |
| | SRT | CGC AGT GAG AAT GAG GTG ATC TCG GCg gt | 173 |
| | Probe | 5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH ₂ -3' | 662 |
| | Invader | 5'-GCC AGC ATA GGC TGT TGA CAC-3' | 663 |
| | Stacker | agactttctatcacttttataacattc | 664 |
| | Arrestor | ggggtatttatgacgtgcgc | 665 |
| | FRET probe | F-TCC-(Z28)-ACTCCGAGCT | 3162 |
| | FRET probe | RR-TCC-(Z28)-ACTCCGAGCT | 3163 |
| | SRT | AGC TCG GAG TAG GAG TGC GCC TCG tt | 3164 |
| Human CYP 3A7 | SRT | AGC ACG GAG TAG GAG TGC GCC TCG tt | 3165 |
| | SRT | AGC CCG GAG TAG GAG TGC GCC TCG tt | 3166 |
| | SRT | AGC GCG GAG TAG GAG TGC GCC TCG tt | 3167 |
| | FRET probe | FL-CAC-Z28-TGC TTC GTG G | 189 |
| | SRT (Epoch) | AGC GCG GAG TAG GAG TGC GCC TCG TTT | 3168 |
| | SRT (Epoch) | CC(A30) GGA AGC AAG TGG TGC GCC TCG TTT-Hex | 3169 |
| | SRT (Epoch) | CC(A30) GGA AGC AAG TGG TGC GCC TCG T(U33)T-Hex | 3170 |
| | SRT (Epoch) | CC(A30) GG(A30) AGC AAG TGG TGC GCC TCG T(U33)T-Hex | 3171 |
| | SRT (Epoch) | CC(A30) GG(A30) (A30)GC AAG TGG TGC GCC TCG T(U33)T-Hex | 3172 |
| | SRT (Epoch) | CC(A30) GG(A30) (A30)GC (A30)AG TGG TGC GCC TCG T(U33)T-Hex | 3173 |
| Human CYP 3A7 | SRT (Epoch) | CC(A30) GG(A30) (A30)GC (A30)(A30)G TGG TGC GCC TCG T(U33)T-Hex | 3174 |
| | Probe | 5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH ₂ -3' | 662 |
| | Invader | 5'-GCC AGC ATA GGC TGT TGA CAC-3' | 663 |
| | Stacker | agactttctatcacttttataacattc | 664 |
| | Arrestor | ggggtatttatgacgtgcgc | 665 |
| | FRET probe | F-TCC-(Z28)-ACTCCGAGCT | 3162 |
| | FRET probe | RR-TCC-(Z28)-ACTCCGAGCT | 3163 |
| | SRT | AGC TCG GAG TAG GAG TGC GCC TCG tt | 3164 |
| | SRT | AGC ACG GAG TAG GAG TGC GCC TCG tt | 3165 |
| | SRT | AGC CCG GAG TAG GAG TGC GCC TCG tt | 3166 |
| Human CYP 3A7 | SRT | AGC GCG GAG TAG GAG TGC GCC TCG tt | 3167 |
| | FRET probe | FL-CAC-Z28-TGC TTC GTG G | 189 |
| | SRT (Epoch) | AGC GCG GAG TAG GAG TGC GCC TCG TTT | 3168 |
| | SRT (Epoch) | CC(A30) GGA AGC AAG TGG TGC GCC TCG TTT-Hex | 3169 |
| | SRT (Epoch) | CC(A30) GGA AGC AAG TGG TGC GCC TCG T(U33)T-Hex | 3170 |
| | SRT (Epoch) | CC(A30) GG(A30) AGC AAG TGG TGC GCC TCG T(U33)T-Hex | 3171 |
| | SRT (Epoch) | CC(A30) GG(A30) (A30)GC AAG TGG TGC GCC TCG T(U33)T-Hex | 3172 |
| | SRT (Epoch) | CC(A30) GG(A30) (A30)GC (A30)AG TGG TGC GCC TCG T(U33)T-Hex | 3173 |
| | SRT (Epoch) | CC(A30) GG(A30) (A30)GC (A30)(A30)G TGG TGC GCC TCG T(U33)T-Hex | 3174 |
| | Probe | 5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH ₂ -3' | 662 |

182 183 3156 3157 173 3158 3159 169 170 171 3160 3161 173 662 663 664 665 3162 3163 3164 3165 3166 3167 189 3168 3169 3170 3171 3172 3173 3174



SEQ ID NO
3175
3176
3177

Secondary system
FRET probe
Secondary Reaction Template 1
Secondary Reaction Template 2

Oligo Sequence (5' to 3')
FL-CAC-Z28-TGC TTC GTG G
CCA GGA AGC AAG TGG TGC GCC TCG #t
CCA GGA AGC AAG TGG AGG CGT GAC ggt

SEQ ID NO

Oligo Sequence (5' to 3')

Assays SRT # Oligo Type

human CYP3A4 2 Probe
Probe
Invader
Stacker
Stacker
Arrestor
Arrestor
Arrestor

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'
5'-CCG TCA CGC CTC GCC CCA CA-HEX-3'
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'
5'-ctttccatactttttatgacattc-3'
5'-ctttccatactttttatgacattc HEX-3'
5'-tggtggggcgaggcg-3'
5'-tggtggggcgaggcg HEX-3'
5'-tggtggggcgaggcg-3'

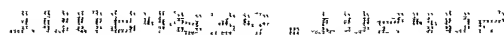
human CYP2C9 2 Probe
Probe
Invader
Stacker
Stacker
Arrestor
Arrestor
Arrestor

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'
5'-CCG TCA CGC CTC ATG GAT AAT GCC C-HEX-3'
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'
5'-CAG AGG AAA GAG AGC TGC AGG G-3'
5'-cag agg aaa gag agc tgc agg g HEX-3'
5'-gggcattatccatgaggcg-3'
5'-gggcattatccatgaggcg HEX-3'
5'-gggcattatccatgaggcg-3'

h/r CYP1A2 1 Probe
Invader
Invader
Arrestor
Arrestor

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'
5'-ctgtcaagtcctgtatAGTGTCTCTC-3'
5'-ctgtgtgaagtcctgtatAGTGTCTCTC-3'
5'-gcagaaaacagtcggtgcgc-3'
5'-gcagaaaacagtcggtgcgc HEX-3'

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100



| Gene | Probe | Sequence | Position |
|--------------|-------|----------|---|
| rat CYP2B2 | 2 | Probe | 5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3' |
| | | Probe | 5'-CCG TCA CGC CTC AGA GCC AAT CAC-HEX-3' |
| | | Invader | 5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3' |
| | | Stacker | 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3' |
| | | Stacker | 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3' |
| | | Arrestor | 5'-gtattggctctgaggcg -3' |
| | | Arrestor | 5'-gtattggctctgaggcg HEX-3' |
| | | Arrestor | 5'-gtattggctctgaggcg -3' |
| | | | |
| | | | |
| human CYP2B6 | 2 | Probe | 5'-CCG TCA CGC CTC CAC CAT ATC CC-NH2-3' |
| | | Probe | 5'-CCG TCA CGC CTC CAC CAT ATC CC-HEX-3' |
| | | Invader | 5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3' |
| | | Stacker | 5'-cggagaagaatgggtgaccatg-3' |
| | | Stacker | 5'-cggagaagaatgggtgaccatg HEX-3' |
| | | Arrestor | 5'-gggatatggtgaggcg-3' |
| | | Arrestor | 5'-gggatatggtgaggcg HEX-3' |
| | | Arrestor | 5'-gggatatggtgaggcg -3' |
| | | | |
| | | | |
| rat CYP4A3 | 1 | Probe | 5'-AAC GAG GCG CAC TTG ACA GAG TCC-NH2-3' |
| | | Invader | 5'-GCT TCT CCC ATT TGT CTA GCA TTA TAA-3' |
| | | Stacker | 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG-3' |
| | | Stacker | 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG HEX-3' |
| | | Arrestor | 5'-ggactctgcaagtcgcg-3' |
| | | Arrestor | 5'-ggactctgcaagtcgcg HEX-3' |
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| | | | | |
|-------------|---|-------|--|------|
| human NR112 | 1 | Probe | 5'- AACGAGGGGCGACGCAACTCGCA NH2-3' | 3197 |
| | | | 5'- AACGAGGGGCGACGCAACTCGCA HEX-3' | 3198 |
| | | | 5'- AACGAGGGGCGACGCAACTCGCA 3-morpholino 1,2-propanediol-3' | 3199 |
| | | | 5'- AACGAGGGGCGACGCAACTCGCA 1,2-octanediol-3' | 3200 |
| | | | 5'- AACGAGGGGCGACGCAACTCGCA methoxyphenyl-3' | 3201 |
| | | | 5'- AACGAGGGGCGACGCAACTCGCA amine(C3)-3' | 3202 |
| | | | 5'- AACGAGGGGCGACGCAACTCGCA amine(C6)-3' | 3203 |
| | | | 5'- GGCCTGCAGAGACTCTGC-3' | 3204 |
| | | | 5'- gccactgaagcac-3' | 3205 |
| | | | 5'- tgcgagttgcgtgcgc-3' | 3206 |
| | | | 5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3' | 3207 |
| | | | 5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3' | 3208 |
| | | | 5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3' | 3209 |
| human ABCC2 | 1 | Probe | 5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3' | 3210 |
| | | | 5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3' | 3211 |
| | | | 5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3' | 3212 |
| | | | 5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3' | 3213 |
| | | | 5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3' | 3214 |
| | | | 5'- gcc aaa tct cct cca -3' | 3215 |
| | | | 5'- tga gat tgg agg tgc gc -3' | 3216 |
| | | | Invader | |
| | | | Stacker | |
| | | | Arrestor | |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FIGURE 48

| Assay | SRT # | Oligo Type | Secondary system | Oligo Sequence (5' to 3') | SEQ ID NO |
|------------------|-------|------------|-------------------------------|--|-----------|
| Human CYP 2B6 | 1 | Probe | FRET probe | FL-CAC-Z28-TGC TTC GTG G | 3217 |
| | | Invader | Secondary Reaction Template 1 | CCA GGA AGC AAG TGG TGC GCC TCG tt | 3218 |
| | | Stacker | Secondary Reaction Template 2 | CCA GGA AGC AAG TGG AGG CGT GAC ggt | 3219 |
| | | Arrestor | Secondary Reaction Template 3 | CCA GGA AGC AAG TGA CGC AGC GAC ggt | 3220 |
| Human CYP 2B6 e6 | 2 | Probe | | CCGTCACGCGCTCGGTTGAGGTTT-NH ₂ | 3221 |
| | | Invader | | AACGAGCGGCACCCACCATATCC-NH ₂ | 639 |
| | | Stacker | | CCAGCGGTTTCCATTGGCAAAGATCAA | 3222 |
| | | Arrestor | | ccggaagaatgggtcgaccatg | 3223 |
| Human CYP 2E1 | 1 | Probe | | gcgatgtgtgtgcgc | 3224 |
| | | Invader | | ccggaagaatgggtcgac | 3225 |
| | | Stacker | | CCGTCACGCGCTCGGTTGAGGTTT-NH ₂ | 1911 |
| | | Arrestor | | CAGCAAGAGAGCGAGAGCGTGTGAC | 3226 |
| Human CYP 2E1 | 2 | Probe | | tggtgctgaattcactgtg | 3227 |
| | | Invader | | gaacctcaaccgaggcg | 3228 |
| | | Stacker | | tggtgctgaattcact | 3229 |
| | | Arrestor | | CCGTCACGCGCTCGGTTGAGGTTT-NH ₂ | 3230 |
| Human CYP 2E1 | 1 | Probe | | ctggtggctgaattcactgtg | 3231 |
| | | Invader | | aacctcaaccgaggcg | 3232 |
| | | Stacker | | ctggtggctgaattcac | 3233 |
| | | Arrestor | | AACGAGCGGCACCCAGGCCCA-NH ₂ | 3234 |
| Human CYP 2E1 | 2 | Probe | | GCATCACCACCATGCGGCTGA | 3235 |
| | | Invader | | cgtacagcggaacacccg | 3236 |
| | | Stacker | | gcataccaccatcgcgctga | 3237 |
| | | Arrestor | | | 3238 |





FIGURE 48

| | | | |
|-------------|----------|--|------|
| 1 | Probe | AACGAGGCGCACCCCTGAGTGC-NH ₂ | 3237 |
| | Invader | GCTGGCCTTGGGTCTTA | 3238 |
| | Stacker | ttccagcaggaagtg | 3239 |
| | Arrestor | gcactcaggggtgcgc | 3240 |
| 1 | Probe | AACGAGGCGCACCCACGAGCA-NH ₂ | 3241 |
| | Invader | CTGTGCTTTTCTCTCTCCATTTA | 3242 |
| | Stacker | ggcagtcggtgagg | 3243 |
| | Arrestor | tgctcgtgggtgcgc | 3244 |
| 1 | Probe | AACGAGGCGCACCTTGGCACTAC-NH ₂ | 3245 |
| | Invader | GGTTGTCATACAAAACAGAGTCCAGAGA | 3246 |
| | Invader | gtatacaacaGAGTCCAGAGA | 3247 |
| | Stacker | gactgtgcccttgg | 3248 |
| | Arrestor | gtagtgccaagtgccgc | 3249 |
| Rat CYP 4A2 | 1 | AACGAGGCGCACCTTGGCAGGACA-NH ₂ | 3250 |
| | Invader | gtacacagaatgagggcaAAAAAGATGAGA | 3251 |
| | Stacker | ctcagcagaaggtgg | 3252 |
| | Arrestor | tgtctgccaagtgcgc | 3253 |
| | Stacker | ctcagcagaaggtgg | 3254 |
| 2 | Probe | CCGTACGCCTCTTGGCAGGACA-NH ₂ | 3255 |
| | Arrestor | tgtctgccaagagggcg | 3256 |
| 1 | Probe | AACGAGGCGCACCTTGGCAGGAC-NH ₂ | 3257 |
| | Stacker | actcagcagaaggtgg | 3258 |
| | Arrestor | gtctgccaagtgccgc | 3259 |
| 1 | Probe | AACGAGGCGCACCTTGGCAGGA-NH ₂ | 3260 |
| | Stacker | cactcagcagaaggtgg | 3261 |
| | Arrestor | tcttgccaagtgccgc | 3262 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

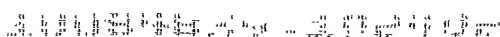


FIGURE 48

| Probe | Sequence | Position |
|----------|---|----------|
| 1 | AACGAGGGCGCACCCGATTGTCC-NH ₂ | 3263 |
| Invader | gattctaaagaacattttaATTCATGATGA | 3264 |
| Stacker | caagactctgagaactgaagg | 3265 |
| Arrestor | ggacaatcgggtgcgc | 3266 |
| 2 | CCGTCACGCCCTCCCGATTGTCC-NH ₂ | 3267 |
| Arrestor | ggacaatcgggaggcg | 3268 |
| 1 | AACGAGGGCGCACTACTATTATTTTCATAG-NH ₂ | 3269 |
| Invader | CATTTCTATCTACTGTTCTGCATCAGA | 3270 |
| Stacker | aaaagatgaggcatataatttc | 3271 |
| Arrestor | ctatgaataatagtagtcgc | 3272 |
| 1 | AACGAGGGCGCACTACTATTATTTTCATAGA-NH ₂ | 3273 |
| Stacker | aaagatgaggcatataatttc | 3274 |
| Arrestor | tctatgaataatagtagtcgc | 3275 |
| 2 | CCGTCACGCCCTCTACTATTATTTTCATAGA-NH ₂ | 3276 |
| Arrestor | tctatgaataatagtagaggcg | 3277 |
| 1 | AACGAGGGCGCACAGGTGTCTGGAG-NH ₂ | 3278 |
| Invader | GGTCCACGCACAAGCTGGGAC | 3279 |
| Stacker | taaaagctacagaaaatgaggcg | 3280 |
| Arrestor | ctccagacacctgtgcgc | 3281 |
| 2 | CCGTCACGCCCTCAGGTGTCTGGAG-NH ₂ | 3282 |
| Arrestor | ctccagacacctgaggcg | 3283 |
| 1 | AACGAGGGCGCACAGGTGTCTGGAGT-NH ₂ | 3284 |
| Stacker | aaaagctacagaaaatgaggcg | 3285 |
| Arrestor | actccagacacctgtgcgc | 3286 |



FIGURE 48

| | | | | |
|----------------|---|---|--|------|
| Rat CYP Pan 3A | 2 | Probe
Invader (degenerate)
Stacker (degenerate)
Arrestor | CCGTCACGCCTCGTTCCTGGG-NH ₂ | 2028 |
| | | | GAGCAAAACCTCATGYCAATRCAC | 3287 |
| | | | tocattYccaaagggcag | 3288 |
| | | | cccaggaacgaggcg | 2034 |
| Rat CYP 4A3 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACTTTTGCTCCC-NH ₂ | 3289 |
| | | | GGTCATAGAGCAGGACTCGTGA | 3290 |
| | | | tgagcgcacgtgaag | 3291 |
| | | | gggagcaaaaagtgcgc | 3292 |
| | 2 | Probe
Arrestor | CCGTCACGCCTCTTTTGTCTCCC-NH ₂ | 3293 |
| | | | gggagcaaaaagaggcg | 3294 |
| Rat CYP 4A3 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACGTTGTGATACCTT-NH ₂ | 3295 |
| | | | gatgaaggccataaattAAAAATTGTGC | 3296 |
| | | | tgggtatggaacgtcc | 3297 |
| | | | aaggatcacacaacgtgcgc | 3298 |
| | 2 | Probe
Arrestor | CCGTCACGCCTCGTTGTGATACCTT-NH ₂ | 3299 |
| | | | aaggatcacacaacgaggcg | 3300 |
| | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACTTGTGATACCTT-NH ₂ | 3301 |
| | | | gatgaaggccataaattAAAAATTGTGGA | 3302 |
| | | | gggtatggaacgtccat | 3303 |
| | | | aaaggatcacacaagtgcgc | 3304 |
| | 2 | Probe
Arrestor | CCGTCACGCCTCTTGTGATACCTT-NH ₂ | 3305 |
| | | | aaaggatcacacaagaggcg | 3306 |

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FIGURE 48

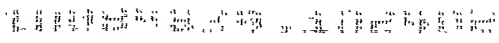
| | | | | |
|-----------------|---|--|--|--------------------------------------|
| rat HSP70-1,2,3 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACCTGGATCA-NH ₂
CCCTCTCGCCCTCGTAA
gcacccgggc
tgatccagggtggtgcgc | 3362
3363
3364
3365 |
| rat HSP70-1,2,3 | 1 | Probe
Invader
Invader
Stacker
Arrestor | AACGAGGGCGCACTCAGACCA-NH ₂
GGCGATCTCCTTCATCTTGA
TGCAGTCTCCTTCATCTTGA
tggacgagatctctc
tggctgtgagtcgc | 3366
3367
3368
3369
3370 |
| Human AGC 1,2 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACCCACTAGCTC-NH ₂
AGTTCAGTTCTCGAAGGGAGTA
tccaciatatgccagc
gagctagtgggtgcgc | 3371
3372
3373
3374 |
| Human AGC 1,2 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACCCCTTGCTC-NH ₂
CGTCCTCACACCAAGGAACTCATA
catagcagccttc
gagacaagggtgcgc | 3375
3376
3377
3378 |
| rat GRM1 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACCTTCTCATCTC-NH ₂
GCATCGGTTACGCCCATCA
ggatggaaatcaggagct
gagatgagaagggtgcgc | 3379
3380
3381
3382 |
| | 2 | Probe
Arrestor | CCGTACAGCCTCCTTCTCATCTC-NH ₂
gagatgagaaggagggcg | 3383
3384 |
| | 3 | Probe
Arrestor | CCGTGCTGCGTCTTCTCATCTC-NH ₂
gagatgagaagagcgag | 3385
3386 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FIGURE 48

| | | | | |
|----------|---|----------|---|------|
| rat GRM1 | 1 | Probe | AACGAGGCGCACCCCTTCTCATC-NH ₂ | 3387 |
| | | Invader | GCATCGGTTTCAGCCCATATA | 3388 |
| | | Stacker | tcggatggaatcagggag | 3389 |
| | | Arrestor | gatgagaagggtgcgc | 3390 |
| | | Probe | CCGTCACGCGCTCCCTTCTCATC-NH ₂ | 3391 |
| | 2 | Arrestor | gatgagaaggagggcg | 3392 |
| rat GRM2 | 1 | Probe | AACGAGGCGCACGAGAGATGAGGAGAGGG-NH ₂ | 3393 |
| | | Invader | GGCCACGAAAGGACACAGAGGAAA | 3394 |
| | | Arrestor | cctctctcatctctctgfcgc | 3395 |
| rat GRM2 | 1 | Probe | AACGAGGCGCACGAGAGATGAGGAGAGGG-NH ₂ | 3396 |
| | | Invader | GCCAGGAAAGGACACAGAGGAAC | 3397 |
| | | Arrestor | cctctctcatctctctgfcgc | 3398 |
| rat GRM5 | 1 | Probe | AACGAGGCGCACTGGAGGAACTCAG-NH ₂ | 3399 |
| | | Invader | ggaattcaagctaataaGATATCATGAA | 3400 |
| | | Stacker | agctccaataggtagcagcc | 3401 |
| | | Arrestor | ctgagttctctccagtgfcgc | 3402 |
| rat GRM5 | 1 | Probe | AACGAGGCGCACTCCTTTCCAAG-NH ₂ | 3403 |
| | | Invader | CAAGAGTGTGGGATCTGAGTTGAA | 3404 |
| | | Stacker | gfatgcagcatggcc | 3405 |
| | | Arrestor | cttggaaggagtgfcgc | 3406 |
| | | Stacker | gfatgcagcatggcctctc | 3407 |
| rat GRM5 | 1 | Probe | AACGAGGCGCACTCGGCCCA-NH ₂ | 3408 |
| | | Invader | CCATCTGTACGTCATACCTGA | 3409 |
| | | Stacker | gccatcactgccc | 3410 |
| | | Arrestor | tggccgagtgfcgc | 3411 |
| | | Invader | ccatctgtcacGTCATACCTGA | 3412 |

3387 3388 3389 3390 3391 3392 3393 3394 3395 3396 3397 3398 3399 3400 3401 3402 3403 3404 3405 3406 3407 3408 3409 3410 3411 3412



| Gene | Probe | Sequence | Position |
|------------------|-------|----------|----------|
| rat GRM7 | 1 | Probe | 3413 |
| | | Invader | 3414 |
| | | Stacker | 3415 |
| | | Arrestor | 3416 |
| | 2 | Probe | 3417 |
| | | Arrestor | 3418 |
| rat TAC1 | 1 | Probe | 3419 |
| | | Invader | 3420 |
| | | Stacker | 3421 |
| | | Arrestor | 3422 |
| | 2 | Probe | 3423 |
| | | Arrestor | 3424 |
| rat CYP 7A1 | 2 | Probe | 3425 |
| | | Invader | 3426 |
| | | Stacker | 3427 |
| | | Arrestor | 3428 |
| human PPAR-alpha | 1 | Probe | 3429 |
| | | Invader | 3430 |
| | | Stacker | 3431 |
| | | Arrestor | 3432 |
| | 2 | Probe | 3433 |
| | | Arrestor | 3434 |



| Secondary system | | | SEQ ID NO |
|-------------------------------------|--|--|-----------|
| FRET probe | | | 3435 |
| Secondary Reaction Template 1 | | | 3436 |
| Secondary Reaction Template 2 | | | 3437 |
| Secondary Reaction Template 3 | | | 3438 |
| Oligo Sequence (5' to 3') | | | |
| FL-CAC-Z28-TGC TTC GTG G | | | |
| CCA GGA AGC AAG TGG TGC GCC TCG tt | | | |
| CCA GGA AGC AAG TGG AGG CGT GAC ggt | | | |
| CCA GGA AGC AAG TGA CGC AGC GAC ggt | | | |
| Oligo Sequence (5' to 3') | | | |
| AACGAGGCGCACTCAGTGGAGAG - NH2 | | | 3439 |
| GGTCTGCCTCGTGAGCA | | | 3440 |
| gtaagccaccacgatg | | | 3441 |
| tctccactgagtgcgc | | | 3442 |
| 5'- AACGAGGCGCACCCAGGTGTG-NH2-3' | | | 3443 |
| 5'- TCACTGCAGGGACTTACCCAGA- 3' | | | 3444 |
| tggtctgagccc | | | 3445 |
| acacctgggtgcgc | | | 3446 |
| Oligo Sequence (5' to 3') | | | |
| AACGAGGCGCACCCAGGTGT NH2 | | | 3447 |
| gtgtgtctgagccc | | | 3448 |
| Oligo Sequence (5' to 3') | | | |
| AACGAGGCGCACCCCTTCCTCT NH2 | | | 3449 |
| GGAGGAGGAGGGGCTGGA | | | 3450 |
| tgggactatgatcaggg | | | 3451 |
| agaggagggtgcgc | | | 3452 |
| Oligo Sequence (5' to 3') | | | |
| AACGAGGCGCACCTTCATTATTGGC NH2 | | | 3453 |
| CCACAAGCTTCGAGTGGGTCATA | | | 3454 |
| cacaggaaacgactcttgg | | | 3455 |
| gcccaataatgaagggtgcgc | | | 3456 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| | | | |
|---------------|---|--|------------------------------|
| human P53AIP1 | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCGCTGCGT NH2
GGCCCTGCACCTCAGAA
gtgagctctgggg
agcgagcggtgcgc | 3457
3458
3459
3460 |
| mouse LLPL | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCTGTCCGTC NH2
CAGATTGAGCCAGAGTGTGAAGTAGA
ttcttgagcaaggtag
agacggacaggtgcgc | 3461
3462
3463
3464 |
| | 1 Probe
Stacker | AACGAGGCGCACCTGTCCGTCT NH2
tcttgagcaaggtagt | 3465
3466 |
| mouse LLPL | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCCAGAGTGTG NH2
GCAGAAAGCAGTTCAGATTTCAGA
aagtagctgtccgtct
cacactctgggtgcgc | 3467
3468
3469
3470 |
| | 1 Probe
Stacker | AACGAGGCGCACCCAGAGTGT NH2
gaagtagctgtccgtc | 3471
3472 |
| mouse LLPL | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCCAGAAAGTAGAGCA NH2
AGACTTGTGGCTGCCGCTGA
tgtacacgttgcccatg
tgctctacttctgggtgcgc | 3473
3474
3475
3476 |

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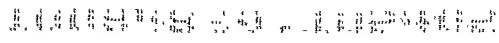
| Secondary system | | | |
|------------------|-------------------------------|-------------------------------------|--------------------------------|
| FRET probe | | | |
| | Secondary Reaction Template 1 | FL-CAC-Z28-TGC TTC GTG G | |
| | Secondary Reaction Template 2 | CCA GGA AGC AAG TGG TGC GCC TCG tt | |
| | Secondary Reaction Template 3 | CCA GGA AGC AAG TGG AGG CGT GAC ggt | |
| | | CCA GGA AGC AAG TGA CGC AGC GAC ggt | |
| SEQ ID NO | | | |
| 3477 | | | |
| 3478 | | | |
| 3479 | | | |
| 3480 | | | |
| | | | |
| Assays | SRT # | Oligo Type | Oligo Sequence (5' to 3') |
| mArbp | 1 | Probe | AACGAGGCGCACCATGCGGATCT NH2 |
| | | Invader | gcctccCTCGGAGCGAA |
| | | Stacker | gctgcattcgttggga |
| | | Arrestor | agatccgcattgtgcgc |
| SEQ ID NO | | | |
| 3481 | | | |
| 3482 | | | |
| 3483 | | | |
| 3484 | | | |
| | | | |
| mArbp | 1 | Probe | AACGAGGCGCACCTGCACATCAC NH2 |
| | | Invader | CACCTTGTCTCCAGTCTTTATCAGA |
| | | Stacker | tcagaatttcaatggtgcc |
| | | Arrestor | gtgatgtcagggtgcgc |
| SEQ ID NO | | | |
| 3485 | | | |
| 3486 | | | |
| 3487 | | | |
| 3488 | | | |
| mArbp | 1 | Probe | AACGAGGCGCGCACCTGCACATCACT NH2 |
| | | Stacker | cagaatttcaatgtgtcct |
| | | | |
| | | | |
| SEQ ID NO | | | |
| 3489 | | | |
| 3490 | | | |
| | | | |
| mArbp | 1 | Probe | AACGAGGCGCACCTCCACAGACAA NH2 |
| | | Invader | CAGTAAGTGGGAAGGTGTACTCAGTA |
| | | Stacker | tgccaggagcgct |
| | | Arrestor | ttgtctgtgagggtgcgc |
| SEQ ID NO | | | |
| 3491 | | | |
| 3492 | | | |
| 3493 | | | |
| 3494 | | | |
| | | | |
| mArbp | 1 | Probe | AACGAGGCGCGCACCTCCAGGTG NH2 |
| | | Invader | TCTCCAGAGCTGGGTTGTTA |
| | | Stacker | gcccctgatagcc |
| | | Arrestor | acctgtgagggtgcgc |
| SEQ ID NO | | | |
| 3495 | | | |
| 3496 | | | |
| 3497 | | | |
| 3498 | | | |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| | | | | |
|---------|---|---|-------------------------------|------|
| mArbp | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCATCGGGATCTG NH2 | 3499 |
| | | | GCCTTCCCTCGGAGCGAA | 3500 |
| | | | ctgcctctctgtggag | 3501 |
| | | | cagatccgcatgtgtgcgc | 3502 |
| mArbp | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACACATCGGGATCT NH2 | 3503 |
| | | | GCCTTCCCTCGGAGCGC | 3504 |
| | | | gctgcctctctgtgg | 3505 |
| | | | agatccgcatgtgtgcgc | 3506 |
| rABCb11 | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCCTCCATTATGCTACA NH2 | 3507 |
| | | | TTGTCCCGGTACTTGATGTTGTA | 3508 |
| | | | gtcaaacagcactggc | 3509 |
| | | | tgtagcataatggggcg | 3510 |
| rABCb11 | 1 | Probe
Arrestor | AACGAGGCGCACCCATTATGCTACA NH2 | 3511 |
| | | | tgtagcataatgggtgcgc | 3512 |
| rABCb11 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACGAGACAATCC NH2 | 3513 |
| | | | GTCAAACAGCACTGGCTCCTGC | 3514 |
| | | | cgaatgttggaacggaggaaac | 3515 |
| | | | ggatgtctctcgtgcgc | 3516 |
| rABCb11 | 2 | Probe
Arrestor | CCGTCACGCCTCGGAGACAATCC NH2 | 3517 |
| | | | ggatgtctcgtgcgc | 3518 |
| rABCb11 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACGATTCCGTAT NH2 | 3519 |
| | | | AGCCATATCCAGAAAGCAAGATCTTGC | 3520 |
| | | | gagggtctcgggc | 3521 |
| | | | atacggaaatccgtgcgc | 3522 |
| rABCb11 | 2 | Probe
Arrestor | CCGTCACGCCTCGGATTCCGTAT NH2 | 3523 |
| | | | atacggaaatccgaggcg | 3524 |

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| | | | | |
|------------------|---|---|---|------------------------------|
| hIVL | 2 | Probe
Invader
Stacker
Arrestor | CCGTCACGCGCTCGCTCCTTCTGC NH2
CAGCTCCTGCTCCTGTGC
TGTTGCTCACATTCTTGTCTCAGGC
gcagaaggagagaggcg | 3551
3552
3553
3554 |
| rGPR37 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCTGGACGTTG NH2
GGAAGAACAAATTTCAATCATTTTCATAGTACATA
gtggcagcccg
caacgtccagggtgcgc | 3555
3556
3557
3558 |
| rGPR37 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACATCATTTTCATAGTACA NH2
GGCAGTGGTGAAGAACAATTTTCAC
tcfgaacgttggtgg
tgtactatgaaatgatgtgcgc | 3559
3560
3561
3562 |
| rGPR37 | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACATCATTTTCATAGTACATCT-NH2
agttggcagtggtggaagaaCAATTTTCAG
ggacgtgtgtggcagccc
agatgtactatgaaatgatgtgcgc | 3563
3564
3565
3566 |
| rEsr2 (rER Beta) | 1 | Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCTCTAGTGATCT NH2
CTCTCTGTTTACAGGTAAGGTGTGA
tgcttcacaccaaggac
agatcactagagggtgcgc | 3567
3568
3569
3570 |
| rEsr2 (rER Beta) | 2 | Probe
Invader
Arrestor | CCGTCACGCGCTCCTCTAGTGATCTTGTCT-NH2
GTCCTCTCTGTTTACAGGTAAGGTGTGG
agcaagatcactagaggaggcg | 3571
3572
3573 |

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| Secondary system | | | Oligo Sequence (5' to 3') | SEQ ID NO |
|-------------------------------|---|----------|--|-----------|
| FRET probe | | | FL-CAC-Z28-TGC TTC GTG G | 3574 |
| Secondary Reaction Template 1 | | | CCA GGA AGC AAG TGG TGC GCC TCG tt | 3575 |
| Secondary Reaction Template 2 | | | CCA GGA AGC AAG TGG AGG CGT GAC ggt | 3576 |
| Secondary Reaction Template 3 | | | CCA GGA AGC AAG TGA CGC AGC GAC ggt | 3577 |
| SRT # Oligo Type | | | Oligo Sequence (5' to 3') | SEQ ID NO |
| Assays
human PTGS2 | 1 | Probe | 5'-AACGAGGCGCACAGAGGTTAGAGAAG-NH2-3' | 3578 |
| | | Invader | 5'-GGAGGAAGGGCTCTAGTATAATAGGC-3' | 3579 |
| | | Stacker | 5'-gcttcccagctttgtagc -3' | 3580 |
| | | Arrestor | 5'-cttctaacctctgtggc -3' | 3581 |
| human FACL1,2 | 2 | Probe | 5'-CCGTCACGCTCGTTGGCTCTTCCC-NH2-3' | 3582 |
| | | Invader | 5'-GGCTTGGGCTTCCGTCTC-3' | 3583 |
| | | Arrestor | 5'-gggaagagagcaacgaggcg-3' | 3584 |
| rat RPS29 | 2 | Probe | 5'-CCGTCACGCTCGCTATGTCTT NH2-3' | 3585 |
| | | Invader | 5'-AGGTCGCTTAGTCCAACCTTAATGAAC-3' | 3586 |
| | | Stacker | 5'-cgcgtactgacggaagcactgtc-3' | 3587 |
| | | Arrestor | 5'-aaggacatagggcgaggcg-3' | 3588 |
| human RPL5 | 1 | Probe | 5'-AACGAGGCGCACGCTTCCGATGTACT NH2-3' | 3589 |
| | | Invader | 5'-GCATGTAATCTGCAACATTCTGGCCCATGATGTA-3' | 3590 |
| | | Stacker | 5'-TGTGCATTAAATTCCTTTCAGAAATCATAACCAGGG-3' | 3591 |
| | | Arrestor | 5'-agtacatcggaagcggtggc-3' | 3592 |
| | 1 | Probe | 5'-AACGAGGCGCACGCTTCCGA NH2-3' | 3593 |
| | | Invader | 5'-GCAACATTCTGGCCCATGATGTC-3' | 3594 |
| | | Stacker | 5'-tgtactctgcattaaattct-3' | 3595 |
| | | Arrestor | 5'-tgggaagcggtggc-3' | 3596 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| | | | | |
|----------------|---|---|---|------------------------------|
| | 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGCGCACCTTCCGAT NH2-3'
5'-GCAACATTCTGGCCCCATGATGTGA-3'
5'-gtactctgcattaaattctt-3'
5'-atcggaagggtgcgc-3' | 3597
3598
3599
3600 |
| human CD36 | 2 | Probe
Invader
Stacker
Arrestor | 5'-CCGTCACGCGCTCTCTTTGCTTAAC NH2-3'
5'-CATTTTCTCTGGCTAGAAACGAACTCTGTACGTATAAGGACA-3'
5'-tgaatgtgtcgtgttcatca-3'
5'-gttaagcaaaaggaggcg-3' | 3601
3602
3603
3604 |
| human ALOX15 | 2 | Probe
Invader
Stacker
Arrestor | 5'-CCGTCACGCGCTCCGATTCTCTCCA NH2-3'
5'-CACGCTCTGTCTTATAGTGGAGACTCAA-3'
5'-CATACCGATAGATGATTTCCAGAGCCGC-3'
5'-tggagaagaatcggaggcg-3' | 3605
3606
3607
3608 |
| | 1 | Probe
Arrestor | 5'-AACGAGGCGCACCGAACAGTGT NH2-3'
5'-acactgttcggtgcgc-3' | 3609
3610 |
| | 2 | Probe
Arrestor
Invader
Stacker | 5'-CCGTCACGCGCTCCGAACAGTGT NH2-3'
5'-acactgttcggtgcgc-3'
5'-GCAGGAGAGTCAAGCTTA-3'
5'-gcctcctctcca-3' | 3611
3612
3613
3614 |
| | 1 | Probe
Arrestor | 5'-AACGAGGCGCACGTAAGT NH2-3'
5'-cctacagtagtgcgc-3' | 3615
3616 |
| | 2 | Probe
Arrestor
Invader
Stacker | 5'-CCGTCACGCGCTCGTACTCGTAGG NH2-3'
5'-cctacagtagtgcgc-3'
5'-CACGCTGGGCGCGCAGC-3'
5'-gcatgtccagctttg-3' | 3617
3618
3619
3620 |
| human EF1alpha | 2 | Probe
Invader
Stacker
Arrestor | 5'-CCGTCACGCGCTCTGTAGACATCCTG NH2-3'
5'-GCCAACAGGAACAGTACCAATACCACCAATTA-3'
5'-GAGAGGCGAGGCGCAAGGG-3'
5'-caggatgtctacaagaggcg-3' | 3621
3622
3623
3624 |



| | | | | |
|-------------|---|----------|--|------|
| mouse ABCA1 | 2 | Probe | 5' CCGTCACGCCCTCCCCGTTTTC-NH2 3' | 3625 |
| | | Arrestor | 5' gaaaacggggaggcg 3' | 3626 |
| | 1 | Probe | 5'-AACGAGGGCGCACCCCGTTTTTC NH2-3' | 3627 |
| | | Arrestor | 5'-gaaaacggggg'gcgc-3' | 3628 |
| | | Invader | 5' GGGCATCTGTTGCACGTAGACAA 3' | 3629 |
| | | Stacker | 5' ttctcagatccgc 3' | 3630 |
| | 2 | Probe | 5'-CCGTCACGCCCTCCCCGTTTTC NH2-3' | 3631 |
| | | Invader | 5' GGGCATCTGTTGCACGTAGACAA 3' | 3632 |
| | | Stacker | 5'-ttctcagatccgcgc-3' | 3633 |
| | | Arrestor | 5'-agaaaacgggggggcgc-3' | 3634 |
| human ABCC2 | 1 | Probe | 5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3' | 3635 |
| | | Invader | 5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3' | 3636 |
| | | Stacker | 5'- gcc aaa tct cct cca -3' | 3637 |
| | | Arrestor | 5'-tga gat tgg agg tgc gc -3' | 3638 |
| | 1 | Probe | 5'-AACGAGGGCGCACTCGGACTGT NH2-3' | 3639 |
| | | Invader | 5'-GCCATAATGTCCAGGTTTCACATCA-3' | 3640 |
| | | Stacker | 5'-ggctccgaatcatggt-3' | 3641 |
| | | Arrestor | 5'-acagtcgagtggcgc-3' | 3642 |
| | 1 | Probe | 5'-AACGAGGGCGCAACCAACCTGTTCA NH2-3' | 3643 |
| | | Invader | 5'-CATCCACTGTGGAAATATCGCCGGA-3' | 3644 |
| human NR112 | | Stacker | 5'-caatccggcctgtg-3' | 3645 |
| | | Arrestor | 5'-tgaacagggttggtgcgc-3' | 3646 |
| | 1 | Probe | 5'- AACGAGGGCGCACGCAACTCGCA NH2-3' | 3647 |
| | | Invader | 5'- GGCC TGCAGAGACTCTGC -3' | 3648 |
| | | Stacker | 5'- gccactgtaagcac -3' | 3649 |
| | | Arrestor | 5'- tgcgagttgcgtgcgc -3' | 3650 |

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| | | | |
|-------------|----------|---|------|
| 1 | Probe | 5'-AACGAGGGCGCACCCCTCTCTGA NH2-3' | 3651 |
| | Invader | 5'-GCCTTTTAAAGGAAAGGGCAACCTTGA-3' | 3652 |
| | Stacker | 5'-tggctcgacctaca-3' | 3653 |
| | Arrestor | 5'-tcagagagggtgogc-3' | 3654 |
| 1 | Probe | 5'-AACGAGGGCGCACGATAGCCAG NH2-3' | 3655 |
| | Invader | 5'-TGCATCCTTACATGTCTCATGACATTGAAGTC-3' | 3656 |
| | Stacker | 5'-tggcctgtccc-3' | 3657 |
| | Arrestor | 5'-ctggctatcgtgogc-3' | 3658 |
| 1 | Probe | 5'-AACGAGGGCGCACGAGTGCT-3' | 3659 |
| | Invader | 5'-AAGTTGCTGGAAGCCACCTC-3' | 3660 |
| | Stacker | 5'-tccaagcagtaggaca-3' | 3661 |
| | Arrestor | 5'-agacactgogt'gogc-3' | 3662 |
| human ABCB1 | Probe | 5'- AAC GAG GCG CAC CAT CCA GAG NH2-3' | 3663 |
| | Invader | 5'- CCT CCA AAA GGA AAC TGG AGG TAT ACT TTA -3' | 3664 |
| | Stacker | 5'- cct ctt tgg tac taa gc -3' | 3665 |
| | Arrestor | 5'- ctc tgg atg gtg ogc -3' | 3666 |
| 1 | Probe | 5'-AACGAGGGCGCACCTTCTATTAGTGA NH2-3' | 3667 |
| | Invader | 5'-CAGATTTCATGAAGAACCCGTATCATTTGATATCAA-3' | 3668 |
| | Stacker | 5'-tgttgacatcagatctctaaat-3' | 3669 |
| | Arrestor | 5'-tcactaatagaagg'gogc-3' | 3670 |
| 1 | Probe | 5'-AACGAGGGCGCACAAATATCCTGTGCC NH2-3' | 3671 |
| | Invader | 5'-CCCCGTAGAAACCTTACATTTATGGTCTC-3' | 3672 |
| | Stacker | 5'-atcaactgaccatccctctgt-3' | 3673 |
| | Arrestor | 5'-ggacaggatattgogc-3' | 3674 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| | | | |
|------|---|--|------------------------------|
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCAATTTCTGCTG NH2-3'
5'-GATTTCATCAGCTGCATTTTCTAATCAACTTA-3'
5'-tctgcatgtgacaagtgtg-3'
5'-cagcaggaaatggtgagc-3' | 3675
3676
3677
3678 |
| 2 | Probe
Invader
Stacker
Arrestor | 5'-CCGTCACGCCCTCCATCCAGAG NH2-3'
5'-CCTCCAAAAGGAAACTGGAGGTATACTTTTA-3'
5'-cctcttggtaactaac-3'
5'-ctctggatggagggc-3' | 3679
3680
3681
3682 |
| h3A4 | 1 Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCTTTCAAGGTG NH2-3'
5'-CTGTAGGCCCCCAAAGACGTA-3'
5'-acaggctgctgt-3'
5'-cacctgaaaggcgccctcgtt-3' | 3683
3684
3685
3686 |
| | 1 Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCTTCACTCCAAAT NH2-3'
5'-TCTTGTGGATTGTTGAGAGAGTCGATGA-3'
5'-gatgtctagatcacatc-3'
5'-attggagtgagtgccctcgtt-3' | 3687
3688
3689
3690 |
| | 1 Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCTCACTCCAAAT NH2-3'
5'-TTGTGGATTGTTGAGAGAGTCGATGA-3'
5'-gatgtctagatcacatc-3'
5'-attggagtgagtgccctcgtt-3' | 3691
3692
3693
3694 |
| | 1 Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCATTAATGAAGGAGAG NH2-3'
5'-GGGTGAGTGGCCAGTTCATAA-3'
5'-aacactgctcggtt-3'
5'-ctctcctcattatggtgagc-3' | 3695
3696
3697
3698 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



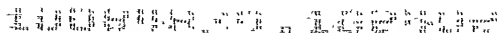
| | | | |
|---|---|--|------|
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCAGATAATAAGGAGAG NH2-3' | 3699 |
| | | 5'-GGTGAGTGGCCCTGTTTCATACC-3' | 3700 |
| | | 5'-aacactgctggtgtt-3' | 3701 |
| | | 5'-ctctctcattatcggc-3' | 3702 |
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACGAGCAAAACCT NH2-3' | 3703 |
| | | 5'-ACTCTGATTAGAGCAAGTTTCATGTTTCATC-3' | 3704 |
| | | 5'-catgccaatgcagttct-3' | 3705 |
| | | 5'-aggttgctcctgctggc-3' | 3706 |
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACGTTTCAAGGTG NH2-3' | 3707 |
| | | 5'-CTGTAGGGCCCCAAAGACGTC-3' | 3708 |
| | | 5'-acaggctgctgt-3' | 3709 |
| | | 5'-cacctgaaacgtgcgcctggt-3' | 3710 |
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCTTTCAGGTG NH2-3' | 3711 |
| | | 5'-CTGTAGGGCCCCAAAGACGTGA-3' | 3712 |
| | | 5'-acaggctgctgt-3' | 3713 |
| | | 5'-cacctgaaagtgccctggt-3' | 3714 |
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACCTCACTCCAAAT NH2-3' | 3715 |
| | | 5'-TCTTGTGGATTGTTGAGAGAGTCGATGA-3' | 3716 |
| | | 5'-gaigtgctagtcacatc-3' | 3717 |
| | | 5'-attggagtgaggcgccctggt-3' | 3718 |
| 1 | Probe
Invader
Stacker
Arrestor | 5'-AACGAGGGCGCACTATAATGAAGGAGAG NH2-3' | 3719 |
| | | 5'-GGGTGAGTGGCCAGTTCATAA-3' | 3720 |
| | | 5'-aacacgtcgtggtt-3' | 3721 |
| | | 5'-ctctctcattatagcgcc-3' | 3722 |

h3A7



| | | | |
|---|----------|--------------------------------------|------|
| 1 | Probe | 5'-AACGAGGCGCAGATAATGAAGGAGAG NH2-3' | 3723 |
| | Invader | 5'-GGGTGAGTGGCCAGTTCATATC-3' | 3724 |
| | Stacker | 5'-aacactgctcgtggttt-3' | 3725 |
| | Arrestor | 5'-ctctctcattatctgcgc-3' | 3726 |
| 1 | Probe | 5'-AACGAGGCGCACCGAGAGCAAACC NH2-3' | 3727 |
| | Invader | 5'-TCTGACTAGAGCAAGTTTCATGTTCAA-3' | 3728 |
| | Stacker | 5'-tcatgccaatgcagtttc-3' | 3729 |
| | Arrestor | 5'-ggtttgcctcggcggc-3' | 3730 |
| 1 | Probe | 5'-AACGAGGCGCAGGAGAGCAAACCT NH2-3' | 3731 |
| | Invader | 5'-TCTGACTAGAGCAAGTTTCATGTTCAAC-3' | 3732 |
| | Stacker | 5'-catgccaatgcagtttct-3' | 3733 |
| | Arrestor | 5'-aggtttgcctcggcggc-3' | 3734 |
| 1 | Probe | 5'-AACGAGGCGCACAGCATGATAAGCA NH2-3' | 3735 |
| | Arrestor | 5'-tgcttatcatgctgcgc-3' | 3736 |
| 2 | Probe | 5'-CCGTCACGCCCTCAGCATGATAAGCA NH2-3' | 3737 |
| | Arrestor | 5'-tgcttatcatgctgcgc-3' | 3738 |
| | Invader | 5'-GGTGCAGGCCAGTGAGC-3' | 3739 |
| | Stacker | 5'-gcaacattaacaccaggatgat-3' | 3740 |
| 1 | Probe | 5'-AACGAGGCGCACGGAGGTGAATTAG NH2-3' | 3741 |
| | Arrestor | 5'-ctaattcacctccgctgcgc-3' | 3742 |
| 2 | Probe | 5'-CCGTCACGCCCTCGGAGGTGAATTAG NH2-3' | 3743 |
| | Arrestor | 5'-ctaattcacctccgagggcg-3' | 3744 |
| | Invader | 5'-TCACAGCCCCATTTTCTTGTTCAC-3' | 3745 |
| | Stacker | 5'-tgtaagcaccigtttct-3' | 3746 |
| 1 | Probe | 5'-AACGAGGCGCACGGAGGTGAATTA NH2-3' | 3747 |
| | Arrestor | 5'-taattcacctccgctgcgc-3' | 3748 |
| 2 | Probe | 5'-CCGTCACGCCCTCGGAGGTGAATTA NH2-3' | 3749 |
| | Arrestor | 5'-taattcacctccgagggcg-3' | 3750 |
| | Invader | 5'-TCACAGCCCCATTTTCTTGTTCAC-3' | 3751 |
| | Stacker | 5'-gtgtaagcaccigttttc-3' | 3752 |

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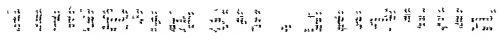


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|---|----------|---------------------------------------|------|
| 1 | Probe | 5'-AACGAGGCGCACTAAATGTGTACCT NH2-3' | 3781 |
| | Invader | 5'-CAGGTTGAACAATCTTCACAGTCAACAAGAA-3' | 3782 |
| | Stacker | 5'-cctgttcagagacaaga-3' | 3783 |
| | Arrestor | 5'-aggiaccacatttagtcgc-3' | 3784 |
| 1 | Probe | 5'-AACGAGGCGCACGCTGTTGTC NH2-3' | 3785 |
| | Invader | 5'-GCTGCAGTTGGTGTAGAAAAACCTGC-3' | 3786 |
| | Stacker | 5'-cagagcatcctggac-3' | 3787 |
| | Arrestor | 5'-gacaaacagcgtgcgc-3' | 3788 |
| 1 | Probe | 5'-AACGAGGCGCACCCAAAAATCCTCA NH2-3' | 3789 |
| | Invader | 5'-GGCTGGGCATCCAGGA-3' | 3790 |
| | Stacker | 5'-ggaacatgaactggatgcc-3' | 3791 |
| | Arrestor | 5'-tgaggattttgggtgcgc-3' | 3792 |
| 1 | Probe | 5'-CCGTCACGCCTCGCTAAGGCTC NH2-3' | 3793 |
| | Invader | 5'-GTTCAATTCCTACCTGACAGGAGATGC-3' | 3794 |
| | Stacker | 5'-aaagaaggtgatccaggc-3' | 3795 |
| | Arrestor | 5'-gagccttagcaggcg-3' | 3796 |
| 1 | Probe | 5'-AACGAGGCGCACCCCTTGACCTTC NH2-3' | 3797 |
| | Arrestor | 5'-gaaggtcaagggtgcgc-3' | 3798 |
| 2 | Probe | 5'-CCGTACGCCTCCCTTGACCTTC NH2-3' | 3799 |
| | Arrestor | 5'-gaaggtcaaggaggcg-3' | 3800 |
| | Invader | 5'-TTGCGTTGCGGGCAACATAGACCAA-3' | 3801 |
| | Invader | 5'-TTGCGTTTCGGGCAACATAGACCAA-3' | 3802 |
| | Stacker | 5'-tgatccaacagagtcgg-3' | 3803 |
| 1 | Probe | 5'-AACGAGGCGCACCCGCATCGAAG NH2-3' | 3804 |
| | Arrestor | 5'-cttcgatcggggtgcgc-3' | 3805 |
| 2 | Probe | 5'-CCGTACAGCCTCCCGGCATCGAAG NH2-3' | 3806 |
| | Arrestor | 5'-cttcgatcgggaggcg-3' | 3807 |
| | Invader | 5'-CTGCCATCTTCTCCGCATAGTA-3' | 3808 |
| | Stacker | 5'-cgctattctgcgc-3' | 3809 |



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|---|----------|-------------------------------------|------|
| 1 | Probe | 5'-AACGAGGGCGACCCGCATAGTC NH2-3' | 3810 |
| | Arrestor | 5'-gactatgagggtgcgc-3' | 3811 |
| | Probe | 5'-CCGTACGGCTCCCGCATAGTC NH2-3' | 3812 |
| | Arrestor | 5'-gactatgagggtgcgc-3' | 3813 |
| | Invader | 5'-TGCAGCCCTGCCATCTTCTA-3' | 3814 |
| 2 | Stacker | 5'-cgcatgaagggtca-3' | 3815 |
| | Probe | 5'-AACGAGGGCGACCAATTGCCATAGC NH2-3' | 3816 |
| | Arrestor | 5'-gctatgcaattggtgcgc-3' | 3817 |
| | Probe | 5'-CCGTACGGCTCCAA TTGCCATAGC NH2-3' | 3818 |
| | Arrestor | 5'-gctatgcaattggtgcgc-3' | 3819 |
| 1 | Invader | 5'-GAGGGATTTTGCCCAAGCATCAGA-3' | 3820 |
| | Stacker | 5'-ttcttctctggaattctg-3' | 3821 |
| | Probe | 5'-AACGAGGGCGACCGCTTTGCATT NH2-3' | 3822 |
| | Arrestor | 5'-aatgcaagggtgcgc-3' | 3823 |
| | Probe | 5'-CCGTACGGCTCCGCTTTGCATT NH2-3' | 3824 |
| 2 | Arrestor | 5'-aatgcaagggtgcgc-3' | 3825 |
| | Invader | 5'-CAGCTCCCTTAGTCTCCATGA-3' | 3826 |
| | Stacker | 5'-gtccatctgatcaccacac-3' | 3827 |
| | Probe | 5'-AACGAGGGCGACCGCGCCAA NH2-3' | 3828 |
| | Arrestor | 5'-ttggcgtcgtgcgc-3' | 3829 |
| 1 | Probe | 5'-CCGTACGGCTCCGACGGCCAA NH2-3' | 3830 |
| | Arrestor | 5'-ttggcgtcgtgcgc-3' | 3831 |
| | Invader | 5'-GTGATGAAGGCCCACTGTCAGCAA-3' | 3832 |
| | Stacker | 5'-gaggaaaccaatcacgtcc-3' | 3833 |

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| Gene | Probe | Sequence | Position |
|----------|----------|---|----------|
| hCEACAM5 | 1 Probe | AACGAGCGCACCTTGCTGGAT-NH ₂ | 3857 |
| | Invader | TTGGAGATAAAGAGCTCTTGTGTGTA | 3858 |
| | Stacker | gttccatcaatcaga | 3859 |
| | Arrestor | atccagcaagtgcgc | 3860 |
| hNOS2A | 2 Probe | CCGTCACGCCTCGTTTCTATCTCCTTTGT-NH ₂ | 3861 |
| | Invader | CGTCAGTTGGTCGGTTCCTGTTTC | 3862 |
| | Arrestor | acaaaggagatagaaacgaggcg | 3863 |
| | | | |
| hNOS2A | 2 Probe | CCGTCACGCCTCGTTTCTATCTC-NH ₂ | 3864 |
| | Invader | CGTCAGTTGGTCGGTTCCTGTTTC | 3865 |
| | Stacker | ctttgtaccgcttc | 3866 |
| | Arrestor | gagatagaaacgaggcg | 3867 |
| hOSM | 1 Probe | AACGCGGCGCACTGTTGTTCT-NH ₂ | 3868 |
| | Invader | GCTGGGCCATGCAGTAGAA | 3869 |
| | Stacker | gagcccgaggatgt | 3870 |
| | Arrestor | aggaacaacagtcgc | 3871 |
| hOSM | 1 Probe | AACGAGGCGCACTGTTGTTCC-NH ₂ | 3872 |
| | Stacker | tgagcccgaggatgt | 3873 |
| hOSM | 1 Probe | AACGAGGCGCACGTCTGAGTTGT-NH ₂ | 3874 |
| | Invader | GTTGGCTCAGCCGTC | 3875 |
| | Stacker | ccagcagctggg | 3876 |
| | Arrestor | acaactcagacgtgcgc | 3877 |
| hICAM | 2 Probe | CCGTCACGCCTCGGCTTGTTGTTCC-NH ₂ | 3878 |
| | Invader | CCGGGATAGGTTCAGGGAGGCGTC | 3879 |
| | Stacker | ggtttcattggggctccct | 3880 |
| | Arrestor | gaacacacaaagccgaggcg | 3881 |



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|----------|---|---|------------------------------|
| hICAM | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACGGCTTGTGT-NH ₂
GATAGGTTACAGGAGGCGTC
gttcggttcacatggg
acacaagccgtgcgc | 3882
3883
3884
3885 |
| hICAM | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACGTATTTCTTGATCTTC-NH ₂
TTTTGGCCTGTTGTAGTCTC
cgctggcgttatagag
gaagatcaagaaatcgtgcgc | 3886
3887
3888
3889 |
| hICAM | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACACCATGGC-NH ₂
CTAGTGTTTTAGGTGTCAGGTC
cccaaatcgtgtglatot
gccatgggtgcgc | 3890
3891
3892
3893 |
| hICAM | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACACCATGGCC-NH ₂
CTAGTGTTTTAGGTGTCAGGTC
ccaaatcgtgtglatcga
ggccatgggtgcgc | 3894
3895
3896
3897 |
| Neomycin | 1 Probe
Invader
Stacker
Arrestor | AACGCGGCGCACGCCATTTTCCAC-NH ₂
CCACAGTCGATGAATCCAGAAAAAGCGA
catgatattcgcaagcag
tggaatatggcgtgcgc | 3898
3899
3900
3901 |
| Neomycin | 1 Probe
Stacker | AACGCGGCGCACGCCATTTTCCA-NH ₂
ccatgatattcggaagcag | 3902
3903 |

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|----------|----------|---|------|
| Neomycin | 1 Probe | AACGAGGCGCACCGATTTCATTTCAG-NH ₂ | 3904 |
| | Invader | CGCTGCCTCGTCCTGA | 3905 |
| | Stacker | ggcaccggacagg | 3906 |
| | Arrestor | ctgaatgaactggg'gcgc | 3907 |
| hMMP3 | 2 Probe | CCGTCACGCGCTCGTCCATTGTTCA-NH ₂ | 3908 |
| | Invader | TGGTCCCTGTTGTATCCTTTC | 3909 |
| | Stacker | tcatcatcaaatggg'gca | 3910 |
| | Arrestor | tgacaatggacgag'cg | 3911 |
| hMMP3 | 2 Probe | CCGTCACGCGCTCGTCCATTGTTTCAT-NH ₂ | 3912 |
| | Stacker | catcatcaaatggg'catc | 3913 |
| | Arrestor | atgaacaatggacgag'cg | 3914 |
| hMMP13 | 1 Probe | AACGAGGCGCACTCAAGGGATAAGGA-NH ₂ | 3915 |
| | Invader | CCTCGGAGACTGGTAATGGCAA | 3916 |
| | Stacker | aggg'cacattgtctg | 3917 |
| | Arrestor | tcctatccctgagtg'cgc | 3918 |
| hMMP13 | 2 Probe | CCGTCGCTGCGTTTCTTCCC-NH ₂ | 3919 |
| | Invader | CAAGCTTTCTCCTGATAGCTCA | 3920 |
| | Stacker | ctaccccg'cacttc | 3921 |
| | Arrestor | gggaaga'aaacgcag | 3922 |
| hMMP13 | 2 Probe | CCGTCGCTGCGTTTCTTCCCC-NH ₂ | 3923 |
| | Stacker | taccccg'cacttct | 3924 |
| | Arrestor | ggggaaga'aaacgcag | 3925 |
| hMMP13 | 1 Probe | AACGAGGCGCACGCGCATCAAGG-NH ₂ | 3926 |
| | Invader | GTTTCTCCTCGGAGACTGGTAATC | 3927 |
| | Stacker | gataaggaa'gggtcacattg | 3928 |
| | Arrestor | ccttgatgc'cg'gcgc | 3929 |

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| hMMP13 | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACTCTTCTCC-NH ₂
GAACCAAGCTTTCTCCTGATAGCA
cctacccgcact
ggaagaagagtcgcg | 3930
3931
3932
3933 |
| hLipc | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCTTTTGTCCGA-NH ₂
AGAGTGATGGGAATTTCTGCATTTTCTA
glagtacatggtaaaagtgtt
tcggaacaaaaggtcgcg | 3934
3935
3936
3937 |
| hLipc | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACCTTTTGTCCG-NH ₂
AGAGTGATGGGAATTTCTGCATTTTCTA
agtagacatggtaaaagtgt
cggaaacaaaaggtcgcg | 3938
3939
3940
3941 |
| hLipc | 2 Probe
Stacker
Arrestor | CCGTCACGCCCTCTTTTGTCCGA-NH ₂
glagtacatggtaaaagtgtt
tcggaacaaaaggaggcg | 3942
3943
3944 |
| hLipc | 2 Probe
Arrestor | CCGTCACGCCCTCTTTTGTCCG-NH ₂
cggaaacaaaaggaggcg | 3945
3946 |
| r/m Lipc | 2 Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCGGAGTCAAT-NH ₂
GCAGGTTGCTGTGTTGCAAC
gaagaggcgacagaaag
attgactcggaggcg | 3947
3948
3949
3950 |
| r/m Lipc | 1 Probe
Invader
Stacker
Arrestor | AACGAGGCGCACTGATGGGAATTTTC-NH ₂
GTAATTCCTTCGCCCCAGGGA
ttattctctttgtccg
gaaaattcccatcagtcgcg | 3951
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|----------|---|---|------------------------------|
| r/m Lipc | 1 Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACTGCTTCTTCA-NH ₂
TCTCTTGACTCATCTGCTCTTTA
gtctttgactcaggctc
tgaagaagcagtgccg | 3955
3956
3957
3958 |
| r/m Lipc | 1 Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACTGCTTCTTCA-NH ₂
TCTCTTGACTCATCTGCTCTTTA
ctttgactcaggctcac
actgaagaagcagtgccg | 3959
3960
3961
3962 |
| hVCAM | 2 Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCGCCCTTTGTTTG-NH ₂
GGGCAACATTGACATAAAGTGTTCGCTACTCTC
ggttcgaattccatgcatc
caaacaaaaggcgaggcg | 3963
3964
3965
3966 |
| hVCAM | 1 Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACATGTGTAATTAGCT-NH ₂
GTGGGCACAGAATCCATTTCATCAC
cggcaacaagaactttcca
agctaaattacacatgigcgc | 3967
3968
3969
3970 |
| hVCAM | 1 Probe
Stacker
Arrestor | AACGAGGGCGCACATGTGTAATTAGCTC-NH ₂
ggcaacaagaactttccaatat
gagctaaattacacatgigcgc | 3971
3972
3973 |
| hVCAM | 1 Probe
Invader
Stacker
Arrestor | AACGAGGGCGCACGCCCTTTGTTTG-NH ₂
GCAACATTGACATAAAGTGTTCGCTACTCTC
ggttcgaattccatgcat
caaacaaaaggcgaggcg | 3974
3975
3976
3977 |
| hVCAM | 2 Probe
Invader
Stacker
Arrestor | CCGTCACGCCCTCGCCCTTTGTTTG-NH ₂
GCAACATTGACATAAAGTGTTCGCTACTCTC
ggttcgaattccatgcat
caaacaaaaggcgaggcg | 3978
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|-----------|-------------------------|---------------------------------------|------|
| hRPL19 | 1 Probe | AAGCAGGCGCACCTTCCTTGG-NH ₂ | 3982 |
| | Invader | CTCTTCACGGCGCTTGCCTGA | 3983 |
| | Stacker | tcttagacctgcgagcc | 3984 |
| | Arrestor | ccaaggaaggcgcc | 3985 |
| hRPL19 | 1 Probe | AACGAGGCGCACCTTCCTTGG-NH ₂ | 3986 |
| | Invader | GCTCTTCACGGCGCTTGCCTGA | 3987 |
| | Stacker | gtcttagacctgcgagcc | 3988 |
| | Arrestor | caaggaagcagcgcc | 3989 |
| r/m RPL19 | 1 Probe | AAGCAGGCGCACCTTCCTTGG-NH ₂ | 3990 |
| | Invader | CTCCCGGCGCTTTCGTGA | 3991 |
| | Stacker | tcttagacctgcgagcc | 3992 |
| | Arrestor | ccaaggaaggcgcc | 3993 |
| r/m RPL19 | 1 Probe | AACGAGGCGCACCTTCCTTGG-NH ₂ | 3994 |
| | Invader | CCTCCCGGCGCTTTCGTGA | 3995 |
| | Stacker | gtcttagacctgcgagcc | 3996 |
| | Arrestor | caaggaagcagcgcc | 3997 |
| h18S rRNA | Probe | Red-CGA-EQ-TTTTACTTCC | 3998 |
| | Probe | Red-CGA-EQ-TTTTACTTCCCTCT | 3999 |
| | Probe | FI-CGACTTTTACTTCCCTCT | 4000 |
| | INVADER oligonucleotide | GGTTCACCTACGGAAACCTTGTTAa | 4001 |
| | Stacker | tctagatagtaagttcgaccg | 4002 |
| | Stacker | tctagatagtaagttcgaccgtctctc | 4003 |
| | Arrestor | agaggaagtaaaattcg | 4004 |

SEQUENCE LISTING



FIGURE 50

